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U.S. DEPARTMENT OF COMMERCE / National Bureau of Standards

Chemical Kinetics of the Gas Phase Combustion of Fuels

(A Bibliography on the Rates and Mechanisms of Oxidation of Aliphatic C_1 to C_{10} Hydrocarbons and of Their Oxygenated Derivatives)

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[2] Located at Boulder, Colorado 80302.

Chemical Kinetics of the Gas Phase Combustion of Fuels

(A Bibliography on the Rates and Mechanisms of Oxidation of Aliphatic C_1 to C_{10} Hydrocarbons and of Their Oxygenated Derivatives)

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David R. Lide, Jr., Chief
Office of Standard Reference Data

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SYNOPTIC TABLE OF CONTENTS
C_1 COMPOUNDS

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
CH	12	12		12	12			12				12
$:CH_2$	12	12		13	13			13				13
CH_3·	13	13	14	14	14			15	15			14-15
CH_4	15	16	17	18	18				18			18
·CHO	19	19	19	19	19	20	20	20		18	20	19-20
HCOO·		20			21				21	20		20
HC(O)OO·		21			21				21	20		21
HCHO	21	21		22	23	24	24	24		21	24	22-24
HCOOH		24										
$CH_2(O·)_2$		24										
$·CH_2OO·$		24										
$CH_2(OO·)_2$										24		
$CH_3O·$	24	24	25	25	25	26	26	26	26	24	25	25
$·CH_2OH$		25										
$·CH_2OOH$										26		
$CH_3OO·$		26	27	27	27	27	27	27	27	26	27	
$CH_2(O·)OH$		26										
$·CH_2OOH$		26										
$CH_2(O·)OOH$		28			28				28			
CH_3OH	28	28		28	28							
CH_3OOH			28							28		

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_2 COMPOUNDS

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
CH≡C·	29	29										
CH≡CH	29	29	29	29								30
CH_2CH·		30										
$CH_2=CH_2$	30	31	31	31	31							
CH_3CH_2·	32	32	32	32				32				32
CH_3CH_3	32	33	33	33	34			34	34			
·CH=C=O	34	34										34
$CH_2=C=O$	34		34									34
CHOCHO		34			34							
$CH_2=CH(O·)$		35					35			35		
or $·CH_2CHO$												
$CH_3C(O)$·		35					35			35	35	35
CH_3COO·						35				35		
·OCH_2CHO						35				35		
$CH_3C(O)OO$·					35					35	36	36
CH_3CHO	36	36	36	36	36	37		37		36		37
$CH_3CH(O·)_2$		37										
$CH_3CH(·)OO$·		37										
$CH_3C(O)OOH$										37		
$CH_3CH(OO·)_2$										37		
CH_3CH_2O·		37					38	38		37		
CH_3OCH_2·		37		37								
$CH_3CH(·)OH$		37									37	
CH_3OOCH_2·		38								38		
CH_3OCH_2O·		38								38		
$CH_3CH(·)OOH$		38								38		
$CH_3CH(O·)OH$		38								38		
CH_3CH_2OO·					39		39		39	38		
·CH_2CH_2OOH		38								38		

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_2 COMPOUNDS Cont'd.

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
$CH_3OOCH_2O·$		39								39		
$CH_3CH(O·)OOH$		39										
$CH_3OCH_2OO·$					39				39			
$·OOCH_2CH_2OOH$										39		
CH_3OCH_3	39			40						39		
CH_3CH_2OH	40	40								39		
CH_3OOCH_3						40				40		
CH_3CH_2OOH										40		

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_3 COMPOUNDS

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
$CH_3C{\equiv}CH$	41			41								
$CH_2{=}C{=}CH_2$	41		41	41								
$CH_2{=}CHCH_2\cdot$		41										
$CH_3CH{=}CH_2$	41	41	42	42	42							
$CH_3CH_2CH_2\cdot$ or $(CH_3)_2CH\cdot$		42		43					43			
$CH_3CH_2CH_3$	43	43	44	44	44							
$CH_2{=}CHCHO$	44		44									
$CH_3CH_2C(O)\cdot$		45								44		
$CH_2{=}CHCH_2O\cdot$		44										
$CH_3CH{=}CH_2OO\cdot$										45		
$CH_3C(O)CH_2O\cdot$										45		
$CH_3CH_2COO\cdot$										45		
$CH_3CH(O\cdot)CHO$										45		
$(CH_3)_2CO$		45				45				45		
$CH_3CH(\cdot)CH_2O\cdot$										45		
$(CH_3)_2C(O\cdot)_2$										46		
CH_3CH_2CHO	45	45		45	45	45						
$\cdot CH_2CH_2CH_2O\cdot$		45										
$(CH_3)_2C(\cdot)OO\cdot$		46										
$CH_3CH(O\cdot)CH_2OO\cdot$										46		
$CH_3CH(OO\cdot)CH_2O\cdot$										46		
$(CH_3)_2C(OO\cdot)_2$										46		
$CH_3CH_2CH_2O\cdot$ or $(CH_3)_2CHO\cdot$		46								46		
$CH_3CH(\cdot)CH_2OH$		46										
$CH_3CH(OH)CH_2\cdot$		46										
$CH_3OCH(\cdot)CH_3$		46										
$CH_3CH(\cdot)CH_2OH$		46										

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_3 COMPOUNDS Cont'd.

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
$(CH_3)_2C(\cdot)OH$		46										
$CH_3CH_2CH_2O\cdot$ or $(CH_3)_2CHO\cdot$						46	46					
$CH_3CH_2CH_2OO\cdot$ or $(CH_3)_2CHOO\cdot$										46		
$CH_3OOCH(\cdot)CH_3$										47		
$CH_3CH(O\cdot)CH_2OH$										47		
$(CH_3)_2C(O\cdot)OH$										47		
$CH_3CH(OH)CH_2O\cdot$										47		
$CH_3OCH(O\cdot)CH_3$										47		
$CH_3OOCH(\cdot)CH_3$		47										
$CH_3CH(\cdot)CH_2OOH$		47										
$CH_3CH_2CH_2OO\cdot$ or $(CH_3)_2CHOO\cdot$							47					
$CH_3OOCH(O\cdot)CH_3$										47		
$CH_3CH(O\cdot)CH_2OOH$										47		
$CH_3CH(OO\cdot)CH_2OH$					47				47			
$CH_3CH(OO\cdot)CH_2OOH$					47				47			
$(CH_3)_2CHOH$	47	48										
$CH_3CH_2CH_2OH$		47										
$CH_3CH_2CH_2OOH$ or $(CH_3)_2CHOOH$										48		

(?) Decompesition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_4 COMPOUNDS

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
$CH{\equiv}CC{\equiv}CH$	49											
$CH_2{=}CHCH{=}CH_2$	49											
$CH_2{=}C{=}CHCH_3$	49											
$CH_2{=}CHCH{=}CH_2$		49	49									
$CH_3CH{=}CHCH_2\cdot$		49										
$CH_2{=}C(CH_3)CH_2\cdot$		49										
$CH_3CH_2CH{=}CH_2$	49	50	50	51								
cis- or trans-$CH_3CH{=}CHCH_3$	49	50	51	51	51							
$(CH_3)_2C{=}CH_2$	50	50	51	51	51							
$CH_3CH_2CH_2CH_2\cdot$ or $CH_3CH_2CH(\cdot)CH_3$		51		52								
$(CH_3)_2CHCH_2\cdot$ or $(CH_3)_3C\cdot$		51		52								
$CH_3CH_2CH_2CH_3$	52	52	53	53	53							
$(CH_3)_3CH$	52	53	53	53	53							
cis- or trans-$CH_3CH{=}CHCHO$		54	54									
$CH_3CH_2CH_2C(O)\cdot$		54										
$CH_3C(O)CH(\cdot)CH_3$		54										
$CH_3CH{=}CHCH_2OO\cdot$										54		
$CH_2{=}C(CH_3)CH_2OO\cdot$										54		
$CH_3CH_2CH_2COO\cdot$										54		
$CH_3C(O)CH(O\cdot)CH_3$		54										
$CH_3CH(\cdot)CH(O\cdot)CH_3$										54		
$(CH_3)_2C(\cdot)CH_2O\cdot$										54		
$CH_3CH_2C(O)CH_3$		54		54								
$CH_3CH(O\cdot)CH(\cdot)CH_3$		54										
$(CH_3)_2C(\cdot)CH_2O\cdot$		54										
$CH_3CH_2CH_2CHO$				54	55							
$CH_3C(O)OCH_2CH_3$		55										
$CH_3CH(O\cdot)CH(OO\cdot)CH_3$										55		
$(CH_3)_2C(O\cdot)CH_2(OO\cdot)$										55		
$(CH_3)_2C(OO\cdot)CH_2O\cdot$										55		
$CH_3CH_2OCH_2CH_2\cdot$										55		
$CH_3CH_2CH_2CH_2O\cdot$ or $CH_3CH_2CH(O\cdot)CH_3$										55		

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_4 COMPOUNDS Cont'd.

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
$CH_3CH_2OCH(\cdot)CH_3$										55		
$(CH_3)_3CO\cdot$		55				56	56			55	56	
$CH_3CH_2CH_2CH_2O\cdot$		55										
$CH_3CH(OH)CH(\cdot)CH_3$		55										
$CH_3CH_2OCH(\cdot)CH_3$		55										
$CH_3OCH_2CH(\cdot)CH_3$		55										
$(CH_3)_2C(\cdot)CH_2OH$		55										
$(CH_3)_2C(OH)CH_2\cdot$		56										
$CH_3CH_2CH(O\cdot)CH_3$							56					
$CH_3CH_2CH_2CH_2OO\cdot$ or $CH_3CH_2CH(OO\cdot)CH_3$							57			56		
$CH_3CH(OH)CH(O\cdot)CH_3$												
$CH_3OCH_2CH(O\cdot)CH_3$		56								56		
$(CH_3)_2C(O\cdot)CH_2OH$										56		
$(CH_3)_2C(OH)CH_2O\cdot$										56		
$CH_3CH(\cdot)CH_2CH_2OOH$												
$CH_3OOCH_2CH(\cdot)CH_3$		56										
$CH_3CH(OOH)CH(\cdot)CH_3$		56										
$(CH_3)_2C(\cdot)CH_2OOH$		57										
$(CH_3)_2CHCH_2OO\cdot$ or $(CH_3)_3COO\cdot$					57		57		57			
$CH_3CH(OO\cdot)OCH_2CH_3$										57		
$CH_3OOCH_2CH(O\cdot)CH_3$		57								57		
$CH_3CH(O\cdot)CH(OOH)CH_3$										57		
$(CH_3)_2C(O\cdot)CH_2OOH$										57		
$CH_3OCH_2CH(OO\cdot)CH_3$					57				57			
$CH_3CH_2OCH_2CH_3$		58		58						57		
$CH_3CH_2CH_2CH_2OH$		57										
$CH_3CH_2CH(OH)CH_3$		57										
$(CH_3)_2CHCH_2OH$		58										
$(CH_3)_3COH$		58										
$CH_3CH_2OOCH_2CH_3$										58		
$(CH_3)_3COOH$				58						58		

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_5 COMPOUNDS

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
$CH_2{=}C{=}C(CH_3)_2$	59											
$CH_3CH_2CH_2CH{=}CH_2$	59	59	59	60								
cis- or trans-$CH_3CH_2CH{=}CHCH_3$	59	59	59	60								
$(CH_3)_2C{=}CHCH_3$	59	59	59	60								
$CH_3CH_2C(CH_3){=}CH_2$			59	60								
$(CH_3)_2CHCH{=}CH_2$			60									
$CH_3CH_2CH_2CH(\cdot)CH_3$		60										
$(CH_3)_2CHCH_2CH_2\cdot$ or $(CH_3)_2CHCH(\cdot)CH_3$ or $(CH_3)_2C(\cdot)CH_2CH_3$		60										
$(CH_3)_3CCH_2\cdot$		60		60								
$CH_3CH_2CH_2CH_2CH_3$	60	60		61	61							
$(CH_3)_2CHCH_2CH_3$	60	61										
$(CH_3)_4C$	60	61		61								
$CH_3CH_2C(O)CH_2CH_3$		61										
$(CH_3)_3CCHO$		61							61			
$CH_3CH{=}CH(OOH)CH_3$										62		
$(CH_3)_2C(O\cdot)CH_2CH_3$										62		
$(CH_3)_3CCH_2O\cdot$							62			62		
$(CH_3)_2C(\cdot)CH_2OCH_3$		62										
$CH_3OCH(CH_3)CH(\cdot)CH_3$		62										
$(CH_3)_2C(O\cdot)CH_2CH_3$							62					
$CH_3CH_2CH_2CH(OO\cdot)CH_3$ or $CH_3CH_2CH(OO\cdot)CH_2CH_3$										62		
$(CH_3)_2C(O\cdot)CH_2OCH_3$										62		
$CH_3OCH(CH_3)CH(O\cdot)CH_3$										62		
$\cdot CH_2C(CH_3)_2CH_2OOH$		62								62		
$(CH_3)_3CCH_2OO\cdot$										62		
$CH_3CH(\cdot)CH_2CH(OOH)CH_3$		62										
$CH_3OOCH(CH_3)CH(\cdot)CH_3$		62										
$(CH_3)_2C(\cdot)CH_2OOCH_3$		63										

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_5 COMPOUNDS Cont'd.

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
$CH_3CH_2CH_2CH(OO\cdot)CH_3$							63					
$(CH_3)_2CHCH_2CH_2OO\cdot$							63		63			
or $(CH_3)_2CHCH(OO\cdot)CH_3$												
or $(CH_3)_2C(OO\cdot)CH_2CH_3$												
$(CH_3)_3CCH_2OO\cdot$							63					
$CH_3OOCH(CH_3)CH(O:)CH_3$										63		
$(CH_3)_2C(O\cdot)CH_2OOCH_3$										63		
$(CH_3)_3COCH_3$										63		
$(CH_3)_3CCH_2OOH$										63		
$(CH_3)_2C(OOH)CH_2CH_3$											63	

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_6 COMPOUNDS

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
$CH_3CH{=}C{=}C(CH_3)_2$	64											
$CH_2{=}CHCH_2CH_2CH{=}CH_2$		64										
$CH_3CH_2CH_2CH_2CH{=}CH_2$	64	64	64									
$(CH_3)_2C{=}C(CH_3)_2$	64		65	65								
cis- or trans-$CH_3CH_2CH_2CH{=}CHCH_3$		64	64									
$CH_3CH_2CH_2C(CH_3){=}CH_2$			64									
$(CH_3)_2CHCH_2CH{=}CH_2$			64									
cis- or trans-$(CH_3)_2CHCH{=}CHCH_3$			64									
cis- or trans-$CH_3CH_2C(CH_3){=}CHCH_3$			65									
$CH_3CH_2CH(CH_3)CH{=}CH_2$			65									
$CH_3CH_2CH_2C(\cdot)(CH_3)_2$		65										
$(CH_3)_2CHC(\cdot)(CH_3)_2$		65		65								
or $(CH_3)_2CHCH(CH_3)CH_2\cdot$												
$CH_3(CH_2)_4CH_3$	65	65	66									
$(CH_3)_2CHCH_2CH_2CH_3$		65										
$(CH_3)_2CHCH(CH_3)_2$	65	66		66								
$(CH_3CH_2)_2CHCH_3$		66	66									
$(CH_3)_3CCH_2CH_3$		66										
$CH_3CH_2CH_2C(CH_3)_2O\cdot$										66		
$(CH_3)_2CHC(CH_3)_2O\cdot$										66		
$(CH_3)_3CC(\cdot)(CH_3)OH$							66					
$CH_3CH_2CH_2CH_2CH(OO\cdot)CH_3$										66		
or $CH_3CH_2CH_2CH(OO\cdot)CH_2CH_3$												
$CH_3CH_2CH_2C(CH_3)_2OO\cdot$							66			66		
$(CH_3)_2CHC(CH_3)_2OO\cdot$							67			67		
$CH_3CH(OOH)CH_2CH(\cdot)CH_2CH_3$										67		
$(CH_3)_2C(OOH)C(\cdot)(CH_3)_2$										67		
or $(CH_3)_2C(OOH)CH(CH_3)CH_2\cdot$												
$(CH_3)_2CHOCH(CH_3)_2$		67										
$(CH_3)_2C(OOH)CH_2CH_2CH_3$										67		
$(CH_3)_2C(OOH)CH(CH_3)_2$										67		
$CH_3CH_2CH_2OOCH_2CH_2CH_3$										67		
$(CH_3)_2CHOOCH(CH_3)_2$		67										

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_7 COMPOUNDS

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
$CH_3(CH_2)_4CH{=}CH_2$		68	68									
cis- or trans-$CH_3CH_2CH{=}CHCH_2CH_2CH_3$			68									
$CH_3(CH_2)_4CH(:)CH_3$		68										
$(CH_3)_3CCH(CH_3)CH_2\cdot$ or $\cdot CH_2C(CH_3)_2CH(CH_3)_2$ or $(CH_3)_3CC(\cdot)(CH_3)_2$				68								
$CH_3(CH_2)_5CH_3$	68	68		69	69							
$CH_3CH_2CH(CH_3)CH_2CH_2CH_3$		69										
$(CH_3)_3CCH_2CH_2CH_3$	68											
$(CH_3)_2CHCH_2CH(CH_3)_2$	68	69										
$(CH_3CH_2)_3CH$		69										
$(CH_3)_3CCH(CH_3)_2$				69								
$CH_3(CH_2)_5CHO$		69										
$CH_3(CH_2)_4CH(OO\cdot)CH_3$										69		

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_8 COMPOUNDS

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
$(CH_3)_2C{=}CHCH{=}C(CH_3)_2$		70										
$CH_3(CH_2)_5CH{=}CH_2$		70	70									
$(CH_3)_2CHCH{=}CHCH(CH_3)_2$		70										
$CH_3(CH_2)_6CH_2\cdot$				70								
or $CH_3(CH_2)_5CH(\cdot)CH_3$												
or $CH_3(CH_2)_4CH(\cdot)CH_2CH_3$												
or $CH_3(CH_2)_3CH(\cdot)(CH_2)_2CH_3$												
$(CH_3)_3CCH_2CH(CH_3)CH_2\cdot$				70								
or $(CH_3)_3CCH_2C(\cdot)(CH_3)_2$												
or $(CH_3)_2CCH(\cdot)CH(CH_3)_2$												
or $:CH_2C(CH_3)_2CH_2CH(CH_3)_2$												
$(CH_3)_3CC(CH_3)_2CH_2\cdot$				70								
$CH_3(CH_2)_6CH_3$	70	70		71								
$CH_3(CH_2)_3CH(CH_3)CH_2CH_3$	70											
$(CH_3)_2CHCH_2CH_2CH(CH_3)_2$		71										
$(CH_3)_3CCH_2CH(CH_3)_2$	70	71		71								
$(CH_3)_2CHCH(CH_3)CH(CH_3)_2$	70	71										
$(CH_3)_3CC(CH_3)_3$	70			71								
$(CH_3)_3CCH_2C(CH_3)_2OOH$										71		
$(CH_3)_3COOC(CH_3)_3$		71								71		

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

SYNOPTIC TABLE OF CONTENTS
C_9 COMPOUNDS

REACTING HYDROCARBON SPECIES \ ATTACKING MOLECULE OR RADICAL	O	O_2	O_3	OH	HOO·	R·	RH	RO·	ROO·	(?) DCMP	(*) RCMB	($) MISC
$CH_3(CH_2)_6CH{=}CH_2$		72										
$CH_3(CH_3)_7CH_3$		72										
$(CH_3)_2CH(CH_2)_5CH_3$		72										
$CH_3CH_2CH(CH_3)CH_2(CH_2)_3CH_3$		72										
$CH_3(CH_2)_2CH(CH_3)CH_2(CH_2)_2CH_3$		72										
$(CH_3)_3CCH_2CH_2CH(CH_3)_2$		72										
$(CH_3CH_2)_2CH(CH_2)_3CH_3$		72										
$(CH_3CH_2CH_2)_2CHCH_2CH_3$		72										

C_{10} COMPOUNDS

$CH_3(CH_2)_7CH{=}CH_2$		73	73									
$CH_3(CH_2)_8CH_3$		73										
$(CH_3)_2CH(CH_2)_4CH(CH_3)_2$		73										
$CH_3(CH_2)_4OO(CH_2)_4CH_3$										73		
$(CH_3)_2C(CH_2CH_3)OO(CH_3CH_2)C(CH_3)_2$										73		

(?) Decomposition
(*) Disproportionation and/or Recombination
($) Miscellaneous reactions

CHEMICAL KINETICS OF THE GAS PHASE COMBUSTION OF FUELS

[A bibliography on the rates and mechanisms of oxidation of aliphatic C_1 to C_{10} hydrocarbons and of their oxygenated derivatives]

FRANCIS WESTLEY

A reaction oriented list of references is provided for papers and reports containing rate data for gas phase reactions of combustion and oxidation of aliphatic saturated or unsaturated C_1 to C_{10} hydrocarbons, alcohols, aldehydes, ketones, ethers, peroxides and their free radicals. The list also includes decomposition, disproportionation, atom transfer and recombination reactions of the oxygen containing species noted above. Pyrolytic reactions of hydrocarbons and their radicals are excluded. All the processes listed here have been reported to occur in the gas phase combustion of fuels. In addition, a list of critical reviews dealing with the reaction kinetics of the above processes and a list of papers dealing with generalized mechanisms of the same reactions are also included. More than 800 papers covering 540 reactions are listed. The period covered extends from 1902 through June 1975.

Keywords: Bibliography; chemical kinetics; combustion; free radicals; gas phase; hydrocarbons; oxidation; oxygen; oxygenated organic compounds; ozone.

INTRODUCTION

This bibliography lists papers and reports on the reaction kinetics of oxidation and combustion of aliphatic C_1 to C_{10} hydrocarbons, their oxygenated derivatives, and their free radicals. In addition, the reactions of decomposition, disproportionation, or recombination of the oxygenated molecules or free radicals are included. The material is presented in two ways: 1). by reaction, listing each pertinent article, and 2). a general reference list, arranged alphabetically by first author.

The articles have been selected from the files of the Chemical Kinetics Information Center. The criterion for inclusion of an article is that there must be some new information on the reaction. That is, simple quotations of the published results of others and ad hoc guesses have been excluded. There are gray areas, such as the statement of a rate calculated from that of the reverse reaction and the equilibrium constant, or mechanistic information. If the information seemed to be important the reference was included.

The reactions listed here are those reported in the papers. There has been no attempt to reinterpret the data. This becomes important because many of the elementary reactions listed are postulated steps in mechanisms used to interpret complex experimental phenomena. Various authors use different mechanisms; the fashion changes with time.

The reaction kinetics study of hydrocarbon combustion has occupied chemists since the early years of the 20th century. The paper published by Bone and Wheeler in 1902 under the title: "The Slow Oxidation of Methane at Low Temperature," was probably the first attempt to study the kinetics of hydrocarbon combustion[1]. A more concerted effort in that direction was undertaken by Hinshelwood and co-workers who, in 1929, studied the oxidation kinetics of ethylene[2], and one year later, the simultaneous oxidation of methane, methanol, and formaldehyde[3].

The important contributions made by Norrish over a period of more than 30 years, from the nineteen thirties into the sixties, gave great impetus to the study of hydrocarbon oxidation kinetics. In 1934, in a paper studying the reaction of methane and oxygen sensitized by nitrogen dioxide, he showed for the first time that this reaction is based on a chain mechanism[4]. In the following years Norrish extended the oxidation studies to ethane and ethylene and, on the basis of the same chain mechanism, developed a theory of the combustion of hydrocarbons[5], expanded it to include

the phenomenon of degenerate branching[6,7], investigated the effect of surfaces and catalysts on the hydrocarbon oxidation[7,8], proposed a generalized mechanism and reaction kinetics for the oxidation of hydrocarbons[9,12,14], used conventional[10], flash photolysis and kinetic spectroscopy[13] techniques to investigate the oxidation and combustion of formaldehyde[15], studied the effect of light on the combustion of hydrocarbons[11,13] and suggested a detailed free-radical mechanism for the gas phase oxidation of n-butenes[14].

During the nineteen fifties and sixties, as well as in more recent years, studies on the reaction kinetics of hydrocarbon combustion and oxidation have been carried on all over the world. Nowadays the interest in kinetics of hydrocarbon combustion is continuing and, as a result of the world energy crisis, has increased considerably.

For these reasons the editor hopes that this bibliography, by summing up what has been done in the field of C_1 to C_{10} hydrocarbon combustion and oxidation kinetics, will make it possible to establish-by difference-what remains to be done in this field, so important for the use of energy from fossil fuels. In fact, a cursory examination of the synoptic tables of contents (pages v-xvii of this bibliography) indicates that, while methane and ethane combustion reactions have been thoroughly studied, the elementary steps taking place in the combustion of C_3 to C_6 hydrocarbons have been l less thoroughly investigated. For the C_7 and higher hydrocarbons the information is meager and much remains to be done.

The number of elementary reactions that might occur in the oxidation of hydrocarbons is very large. Engleman has estimated that well over 1000 have to be considered in the combustion of methane in air[16]. A rough but probably conservative guess for the C_1 to C_{10} hydrocarbon set is more than 10,000 reactions. In contrast, measurements on approximately 540 processes are covered in this bibliography. To what extent and how this gap can be closed should be of concern to combustion kineticists.

There is a closely related field that is not covered in this bibliography: the non-oxidative pyrolysis of hydrocarbons. Allara[17] has estimated that the elementary processes occuring in the pyrolysis of a hydrocarbon are of the order of thousands. The reader interested in this subject should consult the excellent report of Allara and the book of tables published by Benson and O'Neal[18].

It is believed that this bibliography provides extensive coverage of the available experimental work on the kinetics of hydrocarbon oxidation. The 806 references indexed here span all stages of kinetics studies related to combustion. But no claim is made that this bibliography is all-inclusive. Our past experience in the preparation of bibliographies [19,20,21,22] covering the entire time span of kinetics research, seventy years or more, has taught us that it is virtually impossible to identify and obtain every paper or to summarize correctly every paper that has been retrieved. The author will welcome suggestions for additions and corrections of errors and thanks the contributors in advance.

This bibliography is not the result of the effort of a single person, but of the whole staff of Chemical Kinetics Information Center. My thanks to all of them.

In particular, I wish to thank Dr. David Garvin, Chief of the Chemical Process Data Evaluation Section and Director of the Center, and Dr. Robert F. Hampson for their more than helpful suggestions and constant guidance; Dr. William H. Evans for his thorough editing and proofreading of the manuscript; Mr James G. Koch, Supervisor, for tracking down and obtaining papers and reports very difficult to obtain; Mrs. Geraldine Zumwalt and Miss Darlene Connelly, for typing a difficult manuscript with particular care.

Guidelines for the user

Arrangement of the report. This bibliography is in three parts:

Part I. Synoptic Tables of Reactions

Part II. Reactions of Aliphatic Hydrocarbon Combustion and Oxidation with citations

Part III. The bibliography for part II, arranged alphabetically by authors. The complete reference citation for each article mentioned is given here. Occasionally explanatory notes are appended. These establish the "bibliography chain" for closely related papers by the same author.

Parts I and II are arranged by reaction, following the order indicated below. A list of critical reviews or surveys and a list of papers dealing with generalized mechanisms and reaction kinetics are included at the end of part II.

Use of the synoptic tables of reactions. Part I is simply a table of contents arranged for quick location of the number of the page on which a certain reaction can be found. The 540 reactions listed in part II are condensed and grouped in the 10 synoptic tables of part I according to the number of carbon atoms of the reacting organic species (hydrocarbon or oxygenated derivative). Column 1 of each synoptic table lists the reacting organic species in the same order as in part II of the bibliography. The headings of columns 2 to 10 indicate the reaction partner or atom, molecule or radical, in the order O, O_2, O_3, OH, HOO·, R·, RH, RO·, ROO·, where R may be any aliphatic alkyl group. Columns 11 and 12, respectively, indicate decomposition, and disproportionation or recombination of the species listed in column 1. Column 13 indicates a process that cannot fit in any of the preceding columns. Only a small number of such processes are included in the bibliography.

The following examples show how to use the synoptic tables:

$$CH_3CH_2\cdot + O_2(+M) \rightarrow \text{products}$$

Since the synoptic tables do not indicate the presence or absence of a third body, the above letter M is omitted. The reaction is found in the C_2 Hydrocarbons table at the page number indicated by intersection of the horizontal line corresponding to $CH_3CH_2\cdot$ with column 3 (Heading O_2). The page number found in that way is 32:

$$CH_3CHO \rightarrow CH_3\cdot + \cdot CHO$$

This reaction is found in the C_2 Hydrocarbon table at the page number indicated by intersection of the horizontal line corresponding to CH_3CHO with column 11 (decomposition). The corresponding page number is 36.

$$CH_3CHO + CH_3C(O)OO\cdot \rightarrow \text{products}$$

The page number for this reaction is found in the C_2 Table at the intersection of CH_3CHO horizontal line with column 13 (miscellaneous reactions). The page number is 37. This reaction is one of the few reactions which can be found in two different places of the Synoptic tables. Interchanging the two reactants gives: $CH_3C(O)OO\cdot + CH_3CHO \rightarrow$ products. Thus, at the intersection of the $CH_3C(O)OO\cdot$ horizontal line with column 13 (miscellaneous reactions) the same page number is found.

$$CH_3OCH_2OO\cdot + (CH_3)_3COO\cdot \rightarrow \text{products}$$

The two peroxo radicals, $CH_3OCH_2OO\cdot$ and $(CH_3)_3COO\cdot$, are not listed among the headings indicating the attacking species, but the general peroxo radical ROO· is the heading of column 10. Therefore, the page number of this reaction is found in table II at the intersection of the $CH_3OCH_2OO\cdot$ horizontal line with column 10 (ROO·). The page number is 39.

If the reactants for a reaction cannot be located in any line or column of any Table, it means that the reaction is not included in the bibliography.

Ordering of chemical reactions. Parts I and II of this bibliography list unimolecular, bimolecular, and termolecular reactions occurring in

combustion and oxidation of aliphatic C_1 to C_{10} hydrocarbons and unimolecular reactions of their oxygenated derivatives.

The largest group of reactions listed in Parts I and II consists of bimolecular reactions. In most of these processes the reaction takes place between a reacting hydrocarbon molecule (or radical) and an attacking species, which might be either an oxygen species (O, O_2, O_3) or an oxidizing radical (OH, $HOO\cdot$, $RO\cdot$, $ROO\cdot$). The only unoxygenated attacking group, the radical $R\cdot$, appears in reactions with oxygenated species.

The reacting hydrocarbon molecule or radical is displayed first, being followed by the attacking species:

E.g. $CH_3CH_2CH_3 + O_2 \rightarrow$ products (overall)

$HCHO + OH \rightarrow$ products (CO, $\cdot CHO$, $\cdot CH2$, ...)

One exception to this rule is the case of a reacting species designated by a general symbol, as RH, (where RH is any aliphatic hydrocarbon), while the attacking species is a specific oxygenated hydrocarbon radical. Since the number of carbon atoms of the reacting hydrocarbon RH cannot be determined, while that of the attacking radical can, the order of the two species is reversed and the oxygenated radical is displayed first.

E.g. $CH_3CH_2CH_2O\cdot + RH \rightarrow CH_3CH_2CH_2OH + R\cdot$

Likewise in the synoptic tables, the general aliphatic hydrocarbon RH appears as the heading of column 8, while the specific oxygenated radical is listed in column 1.

There is also the case of a bimolecular reaction where either species may be regarded as the attacking one.

E.g. $\cdot CHO + CH_3\cdot \rightarrow CH_4 + CO$ (or $:CH_2 + HCHO$)

In such a case the reaction is listed a second time with the two species in reversed order:

$CH_3\cdot + \cdot CHO \rightarrow CH_4 + CO$ (or $:CH_2 + HCHO$)

(In this case, it is more correct to say that the two reactants are interacting species, rather than naming these respectively reactant and attacking species.)

The general rule for ordering the reactions listed in this bibliography is the standard order of arrangement as described in NBS Technical Note 270-3 pp. 5, 6, and 22[23].

Thus, Part II of this bibliography is divided into 10 sub-groups, C_1 to C_{10} according to the number of C atoms of the first reactant displayed at the left of each reaction, which is always an aliphatic species. Each subgroup of Part II corresponds to one of the synoptic C_1 to C_{10} tables included in Part I. In each of these subgroups, the reactions with first reactants including only C and H atoms are displayed first according to the increasing number of H atoms. Thus, in the C_1 subgroup the order of the first reactants, at the left of each reaction, is: CH, $:CH_2$, $CH_3\cdot$, CH_4.

Likewise, in the C_2 subgroup the order of the first reactants is: $CH{\equiv}C\cdot$, $CH{\equiv}CH$, $CH_2{=}CH\cdot$, CH_2CH_2, $CH_3CH_2\cdot$, CH_3CH_3.

Following the reactions whose first reactants include only C and H atoms are listed the reactions whose first reactants include O atoms, in additions to C and H. The order is first by increasing number of H atoms, then, if two species have the same number of H atoms, by increasing number of O atoms.

Reactions in which the same species reacts with different molecules or radicals are arranged in a sequence depending on these molecules or radicals. According to the above mentioned standard order of arrangement[23], oxygen takes preference over hydrogen, and hydrogen takes preference over carbon. Therefore the sequence of the second species is O, O_2, O_3, H, H_2, OH, $HOO\cdot$,

oxygenated species ($\cdot CH\text{O}$, $HC\text{OO}\cdot$, $HCH\text{O}$, $CH_3\text{O}\cdot$). Generalized hydrocarbon species ($R\cdot$, RH, $R\text{O}\cdot$, $R\text{OO}\cdot$) are last. (R represents any alkyl radical).

Decomposition reactions of a single compound precede the reactions of the same compound with other species. The generalized second (or third) body M, always in parentheses, is disregarded when placing a reaction in its proper sequence.

Reactions of isomeric compounds with the same reactant are listed one after another. No attempt was made to establish a rule for ordering these reactions. When isomeric hydrocarbon radicals occur during the combustion of the parent hydrocarbon, the reactions of these radicals are condensed into a unique reaction. For instance, in the combustion of n-octane, one primary and three secondary n-octyl free radicals are formed; their reactions with OH are listed as follows:

$CH_3(CH_2)_6CH_2\cdot$ [or $CH_3(CH_2)_5CH(\cdot)CH_3$, or $CH_3(CH_2)_4CH(\cdot)CH_2CH_3$, or $CH_3(CH_2)_3CH(\cdot)(CH_2)_3CH_3\cdot$] + OH → products

These n-octyl free radicals are listed in the column of C_8 Synoptic Table in Part I, as follows:

$CH_3(CH_2)_6CH_2\cdot$
or $CH_3(CH_2)_5CH(\cdot)CH_3$
or $CH_3(CH_2)_4CH(\cdot)CH_2CH_3$
or $CH_3(CH_2)_3CH(\cdot)(CH_2)_2CH_3$

Display of Chemical Reactions and Formulae

Straight chain hydrocarbons. All saturated normal hydrocarbons, up to, and including n-pentane, are written in the usual way, showing separately each methyl and methylene group in the chain:

CH_4, CH_3CH_3, $CH_3CH_2CH_3$, $CH_3CH_2CH_2CH_3$, $CH_3CH_2CH_2CH_2CH_3$.

The higher hydrocarbons, from n-hexane to n-decane, are written in a more condensed form to facilitate the counting of the number of methylene groups in the chain:

$CH_3(CH_2)_4CH_3$, $CH_3(CH_2)_5CH_3$, $CH_3(CH_2)_6CH_3$, $CH_3(CH_2)_7CH_3$, $CH_3(CH_2)_8CH_3$

The unsaturated hydrocarbons are written so as to show the position of each double or triple bond in the molecule. E.g.:

Acetylene	$CH{\equiv}CH$
Allene	$CH_2{=}C{=}CH_2$
1,3-Butadiyne	$CH{\equiv}C{-}CH{\equiv}CH$
cis or trans-2-Pentene	cis- or trans- $CH_3CH_2CH{=}CHCH_3$
1-Heptene	$CH_3(CH_2)_4CH{=}CH_2$

Alkyl radicals. The unpaired electron of each alkyl radical is always indicated. E.g.:

Methyl free radical $CH_3\cdot$

Isopropyl free radical $(CH_3)_2CH\cdot$

Hydroxymethyl free radical $\cdot CH_2OH$

If the unpaired electron of an alkyl radical belongs to a carbon atom in the middle of the chain, it is indicated inside a parenthesis following the carbon atom. E.g.:

Sec-butyl free radical $CH_3CH_2CH(\cdot)CH_3$

2-Methyl-2-pentyl free radical $CH_3CH_2CH_2C(\cdot)(CH_3)_2$

Methylene free radical is always written $:CH_2$

Methylidyne free radical is written CH
Formyl free radical is written $\cdot CHO$

Oxy-free-radicals. If the oxygen atom of an oxy radical is attached to the terminal C atom, the radical is written in the usual manner: $CH_3O\cdot$. If the oxygen atom of the oxy radical is attached to a C atom in the middle

of the chain, then the oxygen atom, together with the unpaired electron are inside a parenthesis following the C atom: $(CH_3)_2C(O\cdot)CH_2CH_3$.

If a dioxy diradical has the two oxygen atoms attached to the same carbon, it is written: $CH_2(O\cdot)_2$.

Peroxo-free-radicals. The rules for writing peroxo free radicals are the same as for the oxy-free-radicals: $CH_3OO\cdot$, $CH_3OCH_2CH(OO\cdot)CH_3$, and $CH_2(OO\cdot)_2$.

Inorganic free radicals.
Oxygen atom is written O
Hydroxyl free radical is written OH
Hydroperoxo free radical is written HOO·

Reference Citation

The citations under each reaction list the author(s) and the sources, in the following form:

Author(s)	Source-Year-Volume-Page	Number of Author(s)
Niki, H.	JCPSA6-1966-45-2330	1
Niki and Weinstock	JCPSA6-1966-45-3468	2
Niki, et al.	JCPSA6-1968-48-5729	3 or more

Variations from this format (which we will call "short reference") are usually in the direction of more explicit specification. These variations are never made in the first two fields, source and year. These are fixed and alway present.

The sources are indicated by their ASTM CODEN abbreviations*). A guide to these codes follows. As listed in this guide, the codes include an additional sixth cipher, which is a "check character"**.

*)Blumentahl, J. G., Karaman, M., and Peters, A., Editors, "CODEN FOR PERIODICAL TITLES" (Including Non-Periodical Titles and Deleted Coden), Vol. I and II, ASTM Data Series DS 23B, (1970); First Supplement DS 23B - S1 (05-023021-42) (1972); Second Supplement DS 23B - S2 (05-023022-42) (1974): (American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pa. 19203). "Chemical Abstracts Service Source Index (CASSI), 1907-1974 Cumulative" (Chemical Abstract Service, Columbus, OH 43210); Annual Cumulative Supplement, 1975.

**)The final sixth character in the journal coden is a "check character". This is not shown in the listings in ASTM DS 23B, DS 23B-S1 and DS 23B-S2. The sixth character is given is CASSI.

JOURNAL AND REPORT CODEN IDENTIFICATIONS

ACASA2	Acta Chimica Academiae Scientiarum Hungaricae
ACMØAG	American Chemical Society Monograph Series
ACPCAT	American Chemical Society, Division of Petroleum Chemistry, Preprints
ACPYAR	Acta Physicochimia URSS
ACSRAL	American Chemical Society, Abstracts of Papers
ADCSAJ	Advances in Chemistry Series
ADPCA2	Advances in Photochemistry
AESTC9	Advances In Environmental Science and Technology
AGAGAS	AGARDograph. Advisory Group for Aerospace Research and Development, North Atlantic Treaty Organization, Brussels, Belg., AGARDograph
AIAJAH	A.I.A.A. Journal (American Institute of Aeronautics and Astronautics)
AICEAC	A.I.Ch.E. Journal (American Institute of Chemical Engineers)
AJCHAS	Australian Journal of Chemistry
ANCEAD	Angewandte Chemie
APCSC3	Archiwum Procesow Spalania
ARPCAW	Annual Reports on the Progress of Chemistry. Chemical Society of London
ASACAW	Astronautica Acta
AYKZAN	Armianskii Khimicheskii Zhurnal
AZKZAU	Azerbaidzhanskii Khimicheskii Zhurnal
BACCAT	Bulletin of the Academy of Sciences of the U.S.S.R., Divison of Chemical Science. (Transl. of Izvestiya Akademii Nauk, Seriia Khimicheskaia)
BBPCAX	Berichte der Bunsengesellschaft fuer physikalische Chemie
BCSJA8	Bulletin of the Chemical Society of Japan
BICRAS	Bulletin of the Institute for Chemical Research, Kyoto University
BJSEA8	Bulletin of J.S.M.E. (Japan Society of Mechanical Engineers)
BØØKA7	Book
BSCBAG	Bulletin des Societes Chimiques Belges
BSCFAS	Bulletin de la Societe Chimiques de France
CBFMAØ	Combustion and Flame
CBSTB9	Combustion Science and Technology
CCØMA8	Chemical Communications (London)
CESCAC	Chemical Engineering Science
CESWA4	Combustion, Explosion and Shock Waves (Transl. of Fizika Goreniya Vzryva)
CHDCAO	Compte Rendus Hebdomadaires de Seances de l'Academie des Sciences (Paris). Serie C. Sciences Chimiques

CHPLBC	Chemical Physics Letters
CHREAY	Chemical Reviews
CHTEAA	Chemische Technik
CINMAB	Chimica e l'Industria
CJCHAG	Canadian Journal of Chemistry
CMSHAP	Chemosphere
CRREAF	Academie des Sciences. Comptes Rendus Hebdomadaires des Seances (Paris)
DABBBA	Dissertation Abstracts International, B. The Sciences and Engineering
DANAAW	Doklady Akademii Nauk Armianskoi S.S.R.
DANKAS	Doklady Akademii Nauk S.S.S.R.
DBGGAM	Dopovidi Akademii Nauk Ukrainsikoi Seriya B. Geolog. Geofizike, Khimiya ta Biolog.
DFSRAW	Discussions of the Faraday Society
DIASA9	Dissertation Abstracts
DKCHAY	Doklady Chemistry (Transl. from Doklady Akademii Nauk SSSR)
DKPCAG	Doklady Physical Chemistry (Transl. from Doklady Akademii Nauk SSSR)
EKEPAB	Erdoel und Kohle, Erdgas, Petrochemie
EPTSBT	Environmental Protection Technology series
ESTHAG	Environmental Science and Technology
EVLTAX	Environmental Letters
FDCSB7	Faraday Discussions of the Chemical Society (London)
FGVZA7	Fizika Goreniia i Vzryva
FUELAC	Fuel
GPENAS	Gospodarka Paliwami i Energia
HHHPA4	Hua Hsueh Hsueh Pao (Journal of Chemistry)
HIECAP	High Energy Chemistry (Transl. of Khimiia Vysokikh Energii)
IARKAZ	Izvestiya Akademii Nauk Armianskoi S.S.R., Khimischeskie Nauki
ICBEAJ	Industrie Chimique Belge
IECHAD	Industrial and Engineering Chemistry
IEPDAW	Industrial and Engineering Chemistry, Process Design and Development
IGNKBR	Ispol'zovanie Gaza v Narodnom Khoziaistve (Saratov)
IJCKBR	International Journal of Chemical Kinetics
IJRTA8	Indian Journal of Technology
IUZTA4	Izvestiya Akademii Nauk Uzbekskoi S.S.R., Seriya Tekhnicheskikh Nauk (Tashkent)
IVZEAY	Izvestiya Vysshikh Uchebnykh Zavedenii, Energetika
JACSAT	Journal of the American Chemical Society
JAPUAW	Journal of Applied Chemistry of the U.S.S.R. (Transl. of Zhurnal Prikladnoi Khimii)

JCCCAT	Journal of the Chemical Society, Chemical Communications
JCFTAR	Journal of the Chemical Society, Faraday Transaction I
JCPBAN	Journal de Chimie Physique et de Physico-Chimie Biologique
JCPSA6	Journal of Chemical Physics (New York)
JCSØA9	Journal of the Chemical Society
JCSIAP	Journal of the Chemical Society A. Inorganic, Physical, Theoretical
JCSPAC	Journal of the Chemical Society B. Physical Ørganic
JETAAK	Journal of the Faculty of Engineering, University of Tokyo, Series A. Annual Report
JLUMA8	Journal of Luminescence
JØCEAH	Journal of Ørganic Chemistry
JØCYA9	Journal of Ørganic Chemistry of the USSR (Transl. of Zhurnal Ørganicheskoi Khimii)
JPCEAØ	Journal fuer praktische Chemie
JPCHAX	Journal of Physical Chemistry
JPCRBU	Journal of Physical and Chemical Reference Data
KGKZA7	Kogyo Kagaku Zasshi
KICAA8	Kinetics and Catalysis (Transl. of Kinetika i Kataliz)
MDPCAW	Memoirs of the Defense Academy, Mathematics, Physics, Chemistry and Engineering
NATUAS	Nature
NBTNAE	U.S. National Bureau of Standards, Technical Note
NEFTAH	Neftekhimiya
NENKAU	Nenryo Kyokai-Shi
NSRDAP	U.S. National Bureau of Standards. National Standards Reference Data Series
ØXCRA4	Øxidation and Combustion Reviews
PAKBAG	Primyshlennost Armenii
PECHAM	Petroleum Chemistry USSR (Transl. of Neftekimiya)
PHZSAL	Physikalische Zeitschrift der Sowjetunion
PLSAAE	Planetary and Space Science
PRKNAZ	Progress in Reaction Kinetics
PRLAAZ	Proceedings of the Royal Society, Series A. Mathematical and Physical Sciences
PSIRAA	Pakistan Journal of Scientific and Industrial Research
PTPTAØ	Problemy Teploenergetiki i Prikladnoi Teplofiziki (Alma-ata)
QUREA7	Quarterly Reviews (London)
RCBUAU	Revista de Chimie (Bucharest)
RCTEA4	Rubber Chemistry and Technology
REKIDM	Reaction Kinetics (Specialist Periodical Reports) Chem. Soc. (London)
RIFPA9	Revue de l'Institut Francais du Petrole et Annales des Combustibles Liquides

RJPCAR	Russian Journal of Physical Chemistry (Transl. of Zhurnal Fizicheskoi Khimii)
RPCAAW	Reviews of Pure and Applied Chemistry
RTCPA3	Recueil des Travaux Chimiques des Pays-Bas
RZKHAR	Referativnyi Zhurnal, Khimiya
RZTEAT	Referativnyi Zhurnal, Teploenergetika
SVCIA7	Soviet Chemical Industry (Transl. of Khimicheskaia Promyshlennost)
SYMCAQ	Symposium (International) on Combustion [Papers] (Pittsburgh)
TETRAB	Tetrahedron
TFSØA4	Transaction of the Faraday Society
TPØVA7	Trudy Instituta i Proizvodstvennyi Øpyt, Vsesoiunznyi Nauchno-Issoledovatel'skii Institut Ispol'zovaniia Gasa v Narodnom Khoziaistve, Podzemnogo Khraneniia Nefti, Nefteproduktov i Szhizhennykh Gazov "Vniipromgas" (Moscow)
TPSGAG	Teoriya i Praktika Szhiganiya Gaza (Leningrad)
USFØA7	Uspekhi Fotoniki (Leningrad)
UYTIAX	Uchenye Zapiski Yaroslavskogo Tekhnologischeskogo Instituta
WSCPAH	Western States Section, Combustion Institute
WZTLA3	Wissenschaftliche Zeitschrift der Technischen Hochschule fuer Chemie "Carl Schorlemmer" Leuna-Merseburg
XADRCH	United States National Technical Information Service, AD Report
ZENAAU	Zeitschrift fuer Naturforschung, Teil A. Astrophyik, Physik und physikalische Chemie (Tuebingen, German)
ZFKHA9	Zhurnal Fizicheskoi Khimii
ZPCFAX	Zeitschrift fuer physikalische Chemie (Frankfurt am Main)
ZPCLAH	Zeitschrift fuer physikalische Chemie (Leipzig)
11RFAO	Problemy Økisleniia Uglevodorodov, Doklady Vsesoiuznoe Soveshchanie po Voprosam Økisleniia Uglevodorodov, (Moscow, 1951)
18VHAX	Voprosy Khimicheskoi Kinetiki, Kataliza, i Reaktsionnoi Sposobnosti; Doklady k Vsesoiuznomu Soveschaniiu po Khimisheskoi Kinetike i Reaktsionnoi Øtdelenie Khimicheskikh Nauk Sposobnosti. 1955
21RAAM	Uspekhi Khimii Øganicheskikh Perekisnykh Soedinenii i Autookisleniia, Doklady na Vsesoiuznci Konferentsii po Sintezu, Issledovaniiu i Primeneniiu Øganicheskikh Perekisei, 3rd, Lvov, 1965 (1969)
23ASA5	Voprosy Teorii Goreniya, Trudy Øbshchemoskovskogo Seminara po Teorii Goreniya, 1970
25OIAZ	Chemical Reactions in Urban Atmospheres, Proceedings of the Symposium, General Motors Research Laboratories, Warren Michigan, Øctober 6-7, 1969
26JØAP	Gorenie i Vzryv, Materialy Vsesoiuznogo Simpoziuma po Goreniiu i Vzrivu, 3rd, Leningrad, U.S.S.R., July 5-10, 1971 (Pub. 1972)
27PGA4	Materialy Soveshchaniia po Mekhanizmu Ingibirovaniia Tsepnykh Gazovykh Reaktsii, 1st, Kazakhskii Gosudarstvennyi Universitet, Alma-ata, July 22-27, 1970 (Pub. 1971)
28KMA4	Problemy Kinetiki Elementarnykh Khimicheskikh Reaktsii, Doklady Konferentsii po elementarnym Khimicheskim Reaktsiyam, Moscow, 1972 (Pub. 1973)

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20. Westley, F., "A Supplementary Bibliography of Kinetic Data on Gas Phase Reactions of Nitrogen, Oxygen, and Nitrogen Oxides," NBS SP 371 (1973) 79 pages

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$CH + O (+M) \rightarrow CO + H (+M)$ [or $^{\bullet}CHO (+M)$]

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1 (review)
Huie and Herron	PRKNAZ-1975-8-1 (review)
Lin, M. C.	IJCKBO-1974-6-1 (mechanism)

$CH + O_2 \rightarrow CO + OH$ (or $^{\bullet}CHO + O$, or $CO_2 + H$)

Bowman and Seery	CBFMAO-1968-12-611 (mechanism)
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1 (review)
Glass, et al.	SYMCAQ-1965-10-513
Lin, M. C.	IJCKBO-1974-6-1 (mechanism)
Peeters and Vinckier	SYMCAQ-1975-15-969

$CH + OH \rightarrow {}^{\bullet}CHO + H$ (or $CO + H_2$, or $:CH_2 + O$)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1 (review)

$CH + HOO^{\bullet} \rightarrow$ products ($:CHO$, $:CH_2$, $HCHO$, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1 (review)

$CH + H_2O \rightarrow$ products ($^{\bullet}CHO$, $:CH_2$, $HCHO$, $CH_3^{\bullet}$, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1 (review)

$CH + {}^{\bullet}CHO \rightarrow :CH_2 + CO$

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1 (review)

$CH + HCHO \rightarrow :CH_2 + {}^{\bullet}CHO$

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1 (review)

$CH + CH_3O^{\bullet} \rightarrow CH_3^{\bullet} + {}^{\bullet}CHO$ [or $HCHO + :CH_2$, or $CH_4 + CO$]

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1 (review)

$CH + RO^{\bullet} \rightarrow$ products ($^{\bullet}CHO$, $CH_3^{\bullet}$, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1 (review)

$:CH_2 + O (+M) \rightarrow$ products (CO, CH, $HCHO$, ...)

Bradley and Tse	TFSOA4-1969-65-2685
Brown and Thrush	TFSOA4-1967-63-630
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1 (review)
Huie and Herron	PRKNAZ-1975-8-1 (review)
Jones and Bayes	PRLAAZ-1973-335-547
Jones and Bayes	SYMCAQ-1973-14-277
Lavrov and Evlanov	IUZTA4-1969-13-50 (review)
Williams and Smith	CHREAY-1970-70-267 (review)

$:CH_2 + O_2 \rightarrow$ products (CH, $HCHO$, CO_2, ...)

Avramenko and Kolesnikova	DANKAS-1953-89-1037
Avramenko and Kolesnikova	DANKAS-1953-91-107
Avramenko and Kolesnikova	ZFKHA9-1956-30-581
Eberius, et al.	SYMCAQ-1973-14-147 (mechanism)
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1 (review)
Gordon and Lin	CHPLBC-1973-22-107 (related papers)
Jones and Bayes	PRLAAZ-1973-335-547
Laufer and Bass	JPCHAX-1974-78-1344
Lavrov and Evlanov	IUZTA4-1969-13-50 (review)
Lavrov and Kiyan	TPOVA7-1969-21
Norrish and Buckler	BOOKA7-1941-385 (mechanism)
Peeters and Mahnen	BOOKA7-1973-53
Peeters and Vinckier	SYMCAQ-1975-15-969
Rowland, et al.	FDCSB7-1972-53-111

$:CH_2$ + O_2 → products (CH, HCHO, CO_2, ...) (Cont'd)

Russell and Rowland	JACSAT-1968-90-1671	
Vanpée and Grard	SYMCAQ-1955-5-484	

$:CH_2$ + OH (+M) → products (CH, $^{\bullet}$CHO, HCHO, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Peeters and Vinckier	SYMCAQ-1975-15-969	
Williams and Smith	CHREAY-1970-70-267	(review)

$:CH_2$ + HOO$^{\bullet}$ → products ($^{\bullet}$CHO, $CH_3^{\bullet}$, $CH_3O^{\bullet}$, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$:CH_2$ + H_2O → products (HCHO, $CH_3^{\bullet}$, $CH_3O^{\bullet}$, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$:CH_2$ + $^{\bullet}$CHO → CH + HCHO (or $CH_3^{\bullet}$ + CO)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$:CH_2$ + HCHO → products ($^{\bullet}$CHO, $CH_3O^{\bullet}$, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$:CH_2$ + $CH_3O^{\bullet}$ → products ($^{\bullet}$CHO, HCHO ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$:CH_2$ + $CH_2{=}C{=}O$ → CO + $CH_2{=}CH_2$

Laufer and Bass	JPCHAX-1974-78-1344	
Terao, et al.	JACSAT-1963-85-3919	

$:CH_2$ + RO$^{\bullet}$ → products ($^{\bullet}$CHO, HCHO, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_3^{\bullet}$ + O (+M) → products (CH, $^{\bullet}$CHO, HCHO, ...)

Bowman, C. T.	CBSTB9-1970-2-161	
Dean and Kistiakowsky	JCPSA6-1971-54-1718	
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Fenimore and Jones	JPCHAX-1961-65-1532	
Hampson and Garvin	NBTNAE-1975-866-19	(review)
Herron, J. T.	IJCKBO-1969-1-527	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Jones and Bayes	JACSAT-1972-94-6869	(mechanism)
Mack and Thrush	JCFTAR-1974-70-178	
Niki, et al.	JCPSA6-1968-48-5729	
Niki, et al.	SYMCAQ-1969-12-277	
Seery and Bowman	CBFMAO-1970-14-37	
Slagle, et al.	IJCKBO-1974-6-111	
Washida and Bayes	CHPLBC-1973-23-373	

$CH_3^{\bullet}$ + O_2 → products ($:CH_2$, $^{\bullet}$CHO, HCHO, $CH_3O^{\bullet}$, ...)

Allara, et al.	IJCKBO-1972-4-345	
Asaba, et al.	SYMCAQ-1963-9-193	
Avramenko and Kolesnikova	DANKAS-1953-89-1037	
Avramenko and Kolesnikova	DANKAS-1953-91-107	
Avramenko and Postnikov	BACCAT-1960-1796	
Baldwin, et al.	ADCSAJ-1968-76-124	
Baldwin, et al.	SYMCAQ-1971-13-251	
Barnard and Cohen	TFSOA4-1968-64-396	
Basco, et al.	IJCKBO-1972-4-129	
Bowman, C. T.	CBSTB9-1970-2-161	
Brabbs and Brokaw	SYMCAQ-1975-15-893	
Cathonnet and James	JCPBAN-1973-70-1171	(mechanism)
Christie, M. I.	PRLAAZ-1958-244-411	
Cooke and Williams	SYMCAQ-1971-13-757	(evaluation)
Dean and Kistiakowsky	JCPSA6-1971-54-1718	
Demerjian, et al.	AESTC9-1974-4-1	(review)
DeMore and Raper	JCPSA6-1967-46-2500	
Drysdale and Norrish	PRLAAZ-1969-308-305	(mechanism)

$CH_3^{\bullet}$ + O_2 → products (:CH_2, $^{\bullet}CHO$, HCHO, $CH_3O^{\bullet}$, ...) (Cont'd)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Enikolopyan, N. S.	SYMCAQ-1959-7-157	
Falconer and Knox	PRLAAZ-1959-250-493	
Gray, J. A.	JCSOA9-1952-3150	(mechanism)
Hampson and Garvin	NBTNAE-1975-866-26	(review)
Hanst and Calvert	JPCHAX-1959-63-71	(mechanism)
Harding and Norrish	PRLAAZ-1952-212-291	(mechanism)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Heicklen and Johnston	JACSAT-1962-84-4030	
Hoare and Walsh	TFSOA4-1957-53-1102	
Hoey and Kutschke	CJCHAG-1955-33-496	
Ingold and Bryce	JCPSA6-1956-24-360	(mechanism)
Jachimowski, C. J.	CBFMAO-1974-23-233	(estimate)
Karmilova, et al.	ZFKHA9-1956-30-798	
Karmilova, et al.	RJPCAR-1960-34-562	(mechanism)
Kleimenov and Nalbandyan	DKPCAG-1958-122-667	
Kleimenov, et al.	ZFKHA9-1956-30-794	(mechanism)
Knox, J. H.	ARPCAW-1962-59-18	(review)
Lavrov and Evlanov	IUZTA4-1969-13-50	(review)
Lavrov and Kiyan	TPOVA7-1969-21	
Lee and Malmberg	ACSRAL-1961-139-2J	
Mantashyan, et al.	DKPCAG-1972-202-17	
Marcotte and Noyes	DFSOAW-1951-10-236	
Marcotte and Noyes	JACSAT-1952-74-783	
McKellar and Norrish	PRLAAZ-1961-263-51	(mechanism)
McMillan and Calvert	OXCRA4-1965-1-83	(review)
Miyama and Takeyama	JCPSA6-1964-40-2049	
Nalbandyan, A. B.	DANKAS-1948-60-607	(mechanism)
Nalbandyan, A. B.	ZFKHA9-1948-22-1443	(mechanism)
Niki, et al.	ADCSAJ-1972-113-16	(review)
Norrish, R. G. W.	RIFPA9-1949-4-288	(mechanism)
Norrish, R. G. W.	DFSOAW-1951-10-269	(mechanism)
Pearson, G. S.	JPCHAX-1963-67-1686	
Peeters and Mahnen	SYMCAQ-1973-14-133	
Poroikova, A. I.	RZKHAR-1972-5B1151	
Seery and Bowman	CBFMAO-1970-14-37	
Semenov, N. N.	BOOKA7-1959-2-217	(review)
Simonaitis and Heicklen	JPCHAX-1975-79-298	
Skinner, et al.	JCPSA6-1972-56-3853	(calculation)
Sleppy and Calvert	JACSAT-1959-81-769	
Sokolova, et al.	DKCHAY-1969-185-298	
Sokolova, et al.	RZKHAR-1972-5B1168	
Sokolova, et al.	KICAA8-1973-14-721	
Sokolova, et al.	KICAA8-1973-14-977	
Vanpée and Grard	SYMCAQ-1955-5-484	
van den Bergh and Callear	TFSOA4-1971-67-2017	
Von Elbe and Lewis	JACSAT-1937-59-976	(mechanism)
Wenger and Kutschke	CJCHAG-1959-37-1546	
Westenberg and Fristrom	JPCHAX-1961-65-591	(mechanism)

$CH_3^{\bullet}$ + O_3 → $CH_3O^{\bullet}$ + O_2

DeMore and Raper	JCPSA6-1967-46-2500	
Simonaitis and Heicklen	JPCHAX-1975-79-298	

$CH_3^{\bullet}$ + OH → :CH_2 + H_2O (or CH_3OH)

Drysdale and Lloyd	OXCRA4-1970-4-157	(review)
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Greiner, N. R.	JCPSA6-1970-53-1070	
Peeters and Vinckier	SYMCAQ-1975-15-969	

$CH_3^{\bullet}$ + $HOO^{\bullet}$ → products (HCHO, $CH_3O^{\bullet}$, CH_4, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_3^{\bullet}$ + H_2O → $CH_3O^{\bullet}$ + H_2 (or CH_4 + OH)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_3^{\bullet}$ + $^{\bullet}CHO$ → CH_4 + CO (or :CH_2 + HCHO)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_3^{\bullet}$ + HCHO → products ($^{\bullet}$CHO, $CH_3O^{\bullet}$, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Pearson, G. S.	JPCHAX-1963-67-1686	

$CH_3^{\bullet}$ + RO$^{\bullet}$ → products (CH_4, HCHO, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Gray, et al.	PRKNAZ-1967-4-63	(review)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Sochet, et al.	ADCSAJ-1968-76-111	(mechanism)
Sokolova, et al.	KICAA8-1973-14-977	
Thynne and Gray	TFSOA4-1963-59-1149	

$CH_3^{\bullet}$ + ROO$^{\bullet}$ → $CH_3O^{\bullet}$ + RO$^{\bullet}$ (or CH_3OOR)

Heicklen, J.	ADCSAJ-1968-76-23	(review)

CH_4 + O → products ($:CH_2$, $CH_3^{\bullet}$, HCHO, CH_3OH, ...)

Asaba, et al.	SYMCAQ-1963-9-193	
Avramenko and Kolesnikova	DANKAS-1953-91-107	
Avramenko and Kolesnikova	BACCAT-1971-20-2556	
Avramenko and Kolesnikova	11RFAQ-1954-51	
Avramenko, et al.	BACCAT-1963-557	
Azatyan, V. V.	AYKZAN-1967-20-577	
Azatyan, et al.	KICAA8-1964-5-177	
Brabbs and Brokaw	SYMCAQ-1975-15-893	
Bradley, et al.	JCSIAP-1971-326	
Brown and Thrush	TFSOA4-1967-63-630	
Cadle and Allen	JPCHAX-1965-69-1611	
Dean and Kistiakowsky	JCPSA6-1971-54-1718	
Demerjian, et al.	AESTC9-1974-4-1	(review)
DeMore and Raper	JCPSA6-1967-46-2500	
Dryer, F. L.	XADRCH-1972-AD 746284	(review)
Dryer, F. L.	DABBBA-1973-34-1539	(mechanism)
Dryer and Glassman	SYMCAQ-1973-14-987	(review)
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Fenimore and Jones	JPCHAX-1961-65-1532	(mechanism)
Fenimore and Jones	JPCHAX-1961-65-2200	
Froben, F. W.	BBPCAX-1968-72-996	
Hampson and Garvin	NBTNAE-1975-866-19	(review)
Herron, J. T.	IJCKBO-1969-1-527	(review)
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Jones and Bayes	JACSAT-1972-94-6869	(mechanism)
Karmilova, et al.	ZFKHA9-1956-30-798	
Kleimenov and Nalbandyan	DKPCAG-1958-122-667	
Kleimenov, et al.	ZFKHA9-1956-30-794	(mechanism)
Lavrov and Evlanov	IUZTA4-1969-13-50	(review)
Lavrov and Grebenshchikova	23ASA5-1970-126	
Lin and DeMore	JPCHAX-1973-77-863	
Mayer and Schieler	JPCHAX-1968-72-2628	(estimation)
Moshkina, et al.	BACCAT-1959-1654	
Norrish, R. G. W.	PRLAAZ-1935-150-36	
Norrish, R. G. W.	RIFPA9-1949-4-288	(mechanism)
Norrish, R. G. W.	DFSOAW-1951-10-269	(mechanism)
Norrish and Buckler	BOOKA7-1941-385	(review)
Norrish and Foord	PRLAAZ-1936-157-503	
Norrish and Wallace	PRLAAZ-1934-145-307	(mechanism)
Paraskevopoulos and Cvetanović	JACSAT-1969-91-7572	
Pravilov and Vilesov	RJPCAR-1971-45-1018	
Pravilov and Vilesov	USFOA7-1971-41	
Schofield, K.	PLSSAE-1967-15-643	(review)
Simonaitis and Heicklen	JPCHAX-1975-79-298	
Skinner, et al.	JCPSA6-1972-56-3853	(calculation)
Soloukhin, R. I.	SYMCAQ-1971-13-121	
Vanpée and Grard	SYMCAQ-1955-5-484	(mechanism))
Vilesov and Pravilov	HIECAP-1970-4-191	
Vilesov and Pravilov	HIECAP-1970-4-475	
Westenberg and de Haas	JCPSA6-1967-46-490	
Westenberg and de Haas	JCPSA6-1969-50-2512	
Westenberg and Fristrom	JPCHAX-1961-65-591	(mechanism)
Wong and Potter	JCPSA6-1963-39-2211	
Wong and Potter	CJCHAG-1967-45-367	
Young, et al.	JCPSA6-1968-49-4758	

$CH_4 + O_2 \rightarrow$ products (overall, $CH_3^{\bullet}$, $CH_3O^{\bullet}$, ...)

Abramov and Fisak	PTPTAØ-1972-78	
Abramov, et al.	TPSGAG-1967-3-245	
Antonik and Lucquin	BSCFAS-1968-4043	
Antonova, et al.	BACCAT-1955-711	
Asaba, et al.	SYMCAQ-1963-9-193	
Baldwin and Walker	SYMCAQ-1973-14-241	(review)
Barassin, et al.	BSCFAS-1967-2521	
Basevich, et al.	BACCAT-1971-20-1313	
Basevich, et al.	BACCAT-1971-20-2071	
Basevich, et al.	BACCAT-1972-21-2079	
Blundell, et al.	SYMCAQ-1965-10-445	
Bois d'Enghien, et al.	BSCFAS-1968-2321	
Bone and Allum	PRLAAZ-1932-134-578	
Bone and Gardner	PRLAAZ-1936-154-297	
Bone and Wheeler	JCSØA9-1902-81-535	
Bone and Wheeler	JCSØA9-1903-83-1074	
Bowman and Seery	WSCPAH-1968-No. 68-41	
Burke and Van Tiggelen	BSCBAG-1965-74-426	
Cooke and Williams	SYMCAQ-1971-13-757	
Crossley, et al.	CBFMAØ-1972-19-373	
Cullis, et al.	PRLAAZ-1963-276-527	
Dabora, E. K.	CBFMAØ-1975-24-181	
De Wilde and Van Tiggelen	BSCBAG-1968-77-67	(generalized mechanism)
Dorko, et al.	CBFMAØ-1975-24-173	
Dryer, F. L.	XADRCH-1972-AD 746284	
Dryer, F. L.	DABBBA-1973-34-1539	
Dryer and Glassman	SYMCAQ-1973-14-987	
D'Souza and Karim	CBSTB9-1971-3-83	
Egerton and Roy	ZEELAI-1957-61-584	
Egerton, et al.	PRLAAZ-1956-235-158	
Egerton, et al.	CBFMAØ-1957-1-25	
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Enikolopyan, N. S.	SYMCAQ-1959-7-157	
Enikolopyand and Bel'govskii	RJPCAR-1960-34-749	
Enikolopyan and Konareva	BACCAT-1961-210	
Enikolopyan and Konareva	BACCAT-1960-389	
Enikolopian and Korolev	DKPCAG-1958-118-95	
Enikolopyan, et al.	JAPUAW-1959-32-930	
Enikolopyan, et al.	ZFKHA9-1957-31-865	
Evlanov, S. F.	KICAA8-1973-14-427	
Falconer, et al.	JCSØA9-1961-782	
Fort and Hinshelwood	PRLAAZ-1930-129-284	
Frear, G. L.	JACSAT-1934-56-305	
Fristrom and Westenberg	SYMCAQ-1962-8-438	
Garibyan, et al.	AYKZAN-1972-25-95	
Garner and Ham	PRLAAZ-1939-170-80	
Germain and Sueur	BSCFAS-1961-1008	
Glass, et al.	SYMCAQ-1965-10-513	
Higgin and Williams	SYMCAQ-1969-12-579	
Hoare, D. E.	AGAGAS-1965-86-125	
Hoare and Patel	TFSØA4-1969-65-1325	
Hoare and Walsh	SYMCAQ-1955-5-467	
Hoare and Walsh	SYMCAQ-1955-5-474	
Jachimowski, C. J.	CBFMAØ-1974-23-233	
Jacobs, N. F.	DABBBA-1970-30-3121	
James, H.	RIFPA9-1958-13-338	
Karmilova, et al.	ZFKHA9-1956-30-798	
Karmilova, et al.	ZFKHA9-1957-31-851	
Karmilova, et al.	RJPCAR-1960-34-261	
Karmilova, et al.	RJPCAR-1960-34-470	
Karmilova, et al.	RJPCAR-1961-35-512	
Karmilova, et al.	RJPCAR-1961-35-717	
Karmilova, et al.	RJPCAR-1961-35-706	
Karmilova, et al.	RJPCAR-1960-34-562	
Karpov, V. P.	APCSC3-1971-2-157	
Karpov, V. P.	26JØAP-1972-382	
Kashirskii, et al.	IVZEAY-1974-17-71	
Kistiakowsky and Richards	JCPSA6-1962-36-1707	
Kleimenov and Nalbandyan	DKPCAG-1958-122-667	
Kleimenov and Nalbandyan	DKPCAG-1959-124-5	
Knox, J. H.	ARPCAW-1962-59-18	(review)
Kordysh, et al.	SVCIA7-1974-354	
Kovalivnich and Glikin	RZKHAR-1973-11B1055	
Kovalivnich, et al.	FGVZA7-1974-10-446	
Kowalsky, et al.	PHZSAL-1932-1-451	
Kozlov, G. I.	INFZA9-1958-1-41	

$CH_4 + O_2 \rightarrow$ products (overall, $CH_3^{\cdot}$, $CH_3O^{\cdot}$, ...) (Cont'd)

Kozlov, G. I.	SYMCAQ-1959-7-142	
Lavrov, N. V.	IGNKBO-1967-27	(mechanism)
Lavrov and Grebenshchikova	23ASA5-1970-126	
Lavrov and Grebenshchikova	TPOVA7-1973-4	
Lavrov and Pervykh	TPOVA7-1973-3	
Levy, et al.	SYMCAQ-1962-8-524	
Lewis and Von Elbe	BOOKA7-1961-90	(review)
Lifshitz, et al.	CBFMAO-1971-16-311	
Mari, R.	JCPBAN-1962-59-589	
Mari, et al.	JCPBAN-1962-59-596	
Mari, et al.	JCPBAN-1962-59-324	
Mayer and Schieler	JPCHAX-1968-72-2628	(estimation)
Miller, et al.	RJPCAR-1960-34-940	
Minkoff and Tipper	BOOKA7-1962-151	(review)
Moshkina, et al.	BACCAT-1959-1654	
Moshkina, et al.	BACCAT-1957-821	
Mullins, B. P.	FUELAC-1953-32-343	
Nalbandyan, A. B.	DANKAS-1948-60-607	
Nalbandyan, A. B.	ZFKHA9-1948-22-1443	
Naylor and Wheeler	JCSOA9-1935-1426	
Nemeth and Sawyer	JPCHAX-1969-73-2421	
Nemeth, et al.	MGKLAL-1974-29-100	
Neiman and Egorov	PHZSAL-1932-1-700	
Neiman and Egorov	ZFKHA9-1932-3-61	
Neiman and Serbinov	NATUAS-1931-128-1040	
Neiman and Serbinov	PHZSAL-1932-1-536	
Neiman and Serbinov	PHZSAL-1933-4-433	
Neiman and Serbinov	ZFKHA9-1932-3-75	
Neiman and Serbinov	ZFKHA9-1933-4-41	
Newitt and Gardner	PRLAAZ-1936-154-329	
Newitt and Haffner	PRLAAZ-1932-134-591	
Norrish, R. G. W.	PRLAAZ-1935-150-36	
Norrish, R. G. W.	RIFPA9-1949-4-288	(mechanism)
Norrish, R. G. W.	DFSOAW-1951-10-269	(mechanism)
Norrish and Buckler	BOOKA7-1941-385	
Norrish and Foord	PRLAAZ-1936-157-503	
Norrish and Patnaik	NATUAS-1949-163-883	
Norrish and Reagh	PRLAAZ-1940-176-429	
Norrish and Wallace	PRLAAZ-1934-145-307	
Oganov, et al.	PAKBAG-1972-21	
Panduranga, V.	IJOTA8-1973-11-10	
Pelini and Antonik	BSCFAS-1974-2735	
Poroikova and Nalbandyan	KICAA8-1971-12-759	(mechanism)
Schchemelev, et al.	FGVZA7-1974-10-612	
Seery and Bowman	CBFMAO-1970-14-37	
Seery and Bowman	ACSRAL-1967-154-L20	
Semenov, N. N.	PHZSAL-1932-1-546	
Semenov, N. N.	BOOKA7-1959-2-217	(review)
Semenov, N.	BOOKA7-1935-295	(review)
Shtern, V. Ya.	BOOKA7-1964	(review)
Simonson and Moore	SYMCAQ-1955-5-458	
Skinner, G. B.	JCPSA6-1973-58-412	
Skinner and Ruehrwein	JPCHAX-1959-63-1736	
Skinner, et al.	JCPSA6-1972-56-3853	(calculation)
Skwaradowski, E.	GPENAS-1973-21-17	
Slotin and Style	TFSOA4-1939-35-420	
Sochet, et al.	JCPBAN-1966-63-1555	
Soloukhin, R. I.	CESWA4-1966-2-6	
Soroka and Erinov	TPSGAG-1972-5-105	
Tsuji, et al.	NENKAU-1966-45-684	
Tverdokhlebov, et al.	RZTEAT-1972-12T52	
Vandenabeele, et al.	CBFMAO-1960-4-253	
Vanpée and Grard	FUELAC-1955-34-433	
Vanpée and Grard	SYMCAQ-1955-5-484	
White, D. R.	XADRCH-1970-AD 7140727	
Zallen, D. M.	DABBBA-1974-34-3809	

$CH_4 + O_3 \rightarrow$ products (overall)

Dillemuth and Schubert	WSCPAH-1963-No. 63-22	
Dillemuth, et al.	JPCHAX-1960-64-1496	
Hampson and Garvin	NBTNAE-1975-866-31	(review)
Pravilov and Vilesov	USFOA7-1971-41	
Schofield, K.	PLSSAE-1967-15-643	(review)
Schubert and Pease	JACSAT-1956-78-2044	
Schubert and Pease	JCPSA6-1956-24-919	
Stedman and Niki	EVLTAX-1973-4-303	

$CH_4 + OH \rightarrow CH_3^{\bullet} + H_2O$ (or $CH_3O^{\bullet} + H_2$)

Baldwin, et al.	ADCSAJ-1968-76-124	
Blundell, et al.	SYMCAQ-1965-10-445	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Dixon-Lewis and Williams	SYMCAQ-1967-11-951	
Dryer, F. L.	XADRCH-1972-AD 746284	(review)
Drysdale and Lloyd	OXCRA4-1970-4-157	(review)
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Enikolopyan, N. S.	SYMCAQ-1959-7-157	
Falconer, et al.	JCSOA9-1961-4285	
Fenimore and Jones	JPCHAX-1961-65-1532	(mechanism)
Fenimore and Jones	JPCHAX-1961-65-2200	
Fristrom, R. M.	SYMCAQ-1963-9-560	
Greiner, N. R.	JCPSA6-1967-46-2795	
Greiner, N. R.	JCPSA6-1968-48-1413	
Greiner, N. R.	JCPSA6-1970-53-1070	
Hampson and Garvin	NBTNAE-1975-866-57	(review)
Herron, J. T.	IJCKBO-1969-1-527	(review)
Hoare, D. E.	AGAGAS-1965-86-125	
Hoare and Patel	TFSOA4-1969-65-1325	
Horne and Norrish	NATUAS-1967-215-1373	
Karmilova, et al.	ZFKHA9-1956-30-798	
Karmilova, et al.	RJPCAR-1961-35-717	
Karmilova, et al.	RJPCAR-1960-34-562	
Kleimenov, et al.	ZFKHA9-1956-30-794	
Lavrov and Evlanov	IUZTA4-1969-13-50	(review)
Lin and DeMore	JPCHAX-1973-77-863	
Minkoff and Tipper	BOOKA7-1962-151	(review)
Nalbandyan, A. B.	DANKAS-1948-60-607	(mechanism)
Nalbandyan, A. B.	ZFKHA9-1948-22-1443	(mechanism)
Norrish, R. G. W.	RIFPA9-1949-4-288	(mechanism)
Norrish, R. G. W.	DFSOAW-1951-10-269	(mechanism)
Peeters and Mahnen	SYMCAQ-1973-14-133	
Poroikova, A. I.	RZKHAR-1972-5B1151	
Schofield, K.	PLSSAE-1967-15-643	(review)
Semenov, N. N.	BOOKA7-1959-2-217	(review)
Skinner, et al.	JCPSA6-1972-56-3853	(calculation)
Sochet, L.-R.	JCPBAN-1973-70-456	
Vanpée and Grard	SYMCAQ-1955-5-484	
Von Elbe and Lewis	JACSAT-1937-59-976	(mechanism)
Westenberg and Fristrom	JPCHAX-1961-65-591	
Wilson, Wm. E., Jr.	JCPSA6-1970-53-1300	
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)

$CH_4 + HOO^{\bullet} \rightarrow CH_3^{\bullet} + H_2O_2$ (or $CH_3O^{\bullet} + H_2O$)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Enikolopyan, N. S.	SYMCAQ-1959-7-157	
Karmilova, et al.	RJPCAR-1960-34-562	
Minkoff and Tipper	BOOKA7-1962-151	(review)
Schofield, K.	PLSSAE-1967-15-643	(review)
Semenov, N. N.	BOOKA7-1959-2-217	(review)
Skinner, et al.	JCPSA6-1972-56-3853	(calculation)
Sochet, L.-R.	JCPBAN-1973-70-456	

$CH_4 + {}^{\bullet}CHO \rightarrow CH_3^{\bullet} + HCHO$

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_4 + RO^{\bullet} \rightarrow CH_3^{\bullet} + ROH$

Falconer, et al.	JCSOA9-1961-4285	

${}^{\bullet}CHO\ ({}^{\bullet}M) \rightarrow CO + H\ ({}^{\bullet}M)$

Benson and O'Neal	NSRDAP-1970-21-587	(review)
Bowman, C. T.	CBSTB9-1970-2-161	
Browne, et al.	SYMCAQ-1969-12-1035	
Calvert, J. G.	JPCHAX-1957-61-1206	
DeGraff and Calvert	JACSAT-1967-89-2247	
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Gay, et al.	JCPSA6-1965-43-4017	
Geisbrecht and Daubert	IEPDAW-1975-14-159	
Marcotte and Noyes	DFSOAW-1951-10-236	
Marcotte and Noyes	JACSAT-1952-74-783	
Markevich and Filippova	RJPCAR-1959-33-358	

•CHO (•M) → CO + H (•M) (Cont'd)

McMillan and Calvert	OXCRA4-1965-1-83	(review)
Pearson, G. S.	JPCHAX-1963-67-1686	
Seery and Bowman	CBFMAO-1970-14-37	

•CHO + O → CO + OH (or CO_2 + H, or CH + O_2)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Hampson and Garvin	NBTNAE-1975-866-19	(review)
Herron, J. T.	IJCKBO-1969-1-527	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Mack and Thrush	JCFTAR-1973-69-208	
Mack and Thrush	JCFTAR-1974-70-187	
Niki, et al.	SYMCAQ-1969-12-277	
Schofield, K.	PLSSAE-1967-15-643	(review)
Thrush, B. A.	BBPCAX-1968-72-966	(mechanism)
Westenberg and de Haas	JPCHAX-1972-76-2215	

•CHO + O_2 → products (CO, CO_2, HC(O)OO•,, ...)

Atkinson, et al.	JACSAT-1973-95-7592	(mechanism)
Demerjian, et al.	AESTC9-1974-4-1	(review)
Drysdale and Norrish	PRLAAZ-1969-308-305	(mechanism)
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Enikolopyan, N. S.	SYMCAQ-1959-7-157	
Geisbrecht and Daubert	IEPDAW-1975-14-159	
Hampson and Garvin	NBTNAE-1975-866-25	(review)
Hanst and Calvert	JPCHAX-1959-63-71	(mechanism)
Hay and Hessam	CBFMAO-1971-16-237	
Heicklen and Johnston	JACSAT-1962-84-4030	(mechanism)
Horner, et al.	TFSOA4-1954-50-1201	
Karmilova, et al.	ZFKHA9-1956-30-798	
Karmilova, et al.	RJPCAR-1960-34-562	(mechanism)
Lavrov and Evlanov	IUZTA4-1969-13-50	(review)
Lewis and Von Elbe	BOOKA7-1961-90	(review)
Marcotte and Noyes	DFSOAW-1951-10-236	
Marcotte and Noyes	JACSAT-1952-74-783	
Markevich and Filippova	RJPCAR-1959-33-358	
McMillan and Calvert	OXCRA4-1965-1-83	(review)
Minkoff and Tipper	BOOKA7-1962-136	
Niki, et al.	ADCSAJ-1972-113-16	(review)
Norrish and Thomas	NATUAS-1966-210-728	(mechanism)
Pearson, G. S.	JPCHAX-1963-67-1686	
Peeters and Mahnen	SYMCAQ-1973-14-133	
Semenov, N. N.	BOOKA7-1959-2-217	(review)
Vardanyan and Nalbandyan	KICAA8-1970-11-927	(mechanism)
Vardanyan, et al.	AYKZAN-1972-25-281	
Vardanyan, et al.	DKPCAG-1970-191-210	(mechanism)
Vardanyan, et al.	CBFMAO-1974-22-153	
Von Elbe and Lewis	JACSAT-1937-59-976	(mechanism)

•CHO + O_3 → products

Atkinson, et al.	JACSAT-1973-95-7592	(mechanism)

•CHO + H → products (CO, CH, $:CH_2$, HCHO, ...)

Browne, et al.	SYMCAQ-1969-12-1035	
DeGraff and Calvert	JACSAT-1967-89-2247	
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Herron, J. T.	IJCKBO-1969-1-527	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Mack and Thrush	JCFTAR-1973-69-208	
Mack and Thrush	JCFTAR-1974-70-187	
Niki, et al.	SYMCAQ-1969-12-277	

•CHO + H_2 (•M) → products (CH, $:CH_2$, HCHO, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

•CHO + OH → products (CO, $CH_2{=}CH_2$, ...)

Bowman, C. T.	CBSTB9-1970-2-161	
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Jachimowski, C. J.	CBFMAO-1974-23-233	(estimate)
Schofield, K.	PLSSAE-1967-15-643	(review)
Seery and Bowman	CBFMAO-1970-14-37	
Westenberg and Fristrom	JPCHAX-1961-65-591	(mechanism)

$\cdot CHO + HOO\cdot \rightarrow$ products (CO_2, HCHO, ...)
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$\cdot CHO + H_2O \rightarrow$ products ($:CH_2$, $CH_3\cdot$, HCHO, ...)
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$\cdot CHO + CH \rightarrow CO + :CH_2$
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$\cdot CHO + :CH_2 \rightarrow CH +$ HCHO (or $CH_3\cdot + CO$)
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$\cdot CHO + CH_3\cdot \rightarrow CH_4 + CO$ (or $:CH_2 +$ HCHO)
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$\cdot CHO + CH_4 \rightarrow CH_3\cdot +$ HCHO
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$\cdot CHO + \cdot CHO \rightarrow CO +$ HCHO (or $:CH_2 + CO_2$)
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$\cdot CHO +$ HCHO $\rightarrow CH_3\cdot + CO_2$ (or $CO + CH_3O\cdot$)
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$\cdot CHO + CH_3O\cdot \rightarrow$ products (HCHO, CH_4, ...)
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$\cdot CHO + R\cdot \rightarrow CO +$ RH
DeGraff and Calvert JACSAT-1967-89-2247
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$\cdot CHO +$ RH $\rightarrow$ products (HCHO, $CH_3O\cdot$, ...)
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$\cdot CHO + RO\cdot \rightarrow$ products (HCHO, CH_4, ...)
Engleman, V. S. EPTSBT-1976-600/2:76:003-5/1 (review)

$HCOO\cdot \rightarrow H + CO_2$
Demerjian, et al. AESTC9-1974-4-1 (review)

$HCOO\cdot + O_2 \rightarrow CO_2 + HOO\cdot$
Demerjian, et al. AESTC9-1974-4-1 (review)

$HCOO\cdot +$ HCHO $\rightarrow \cdot CHO +$ HCOOH
Hanst and Calvert JPCHAX-1959-63-71 (mechanism)

$HCOO\cdot + CH_3O\cdot \rightarrow CH_3OH + CO_2$
Heicklen and Johnston JACSAT-1962-84-4030 (mechanism)

$HC(O)OO\cdot (+M) \rightarrow CO +$ HOO$\cdot$ (+M)
Geisbrecht and Daubert IEPDAW-1975-14-159
Scheer, M. D. SYMCAQ-1955-5-435
Vardanyan, et al. DKPCAG-1970-191-210

$HC(O)OO\cdot + O_2 \rightarrow CO + HOO\cdot + O_2$ (or $HCOO\cdot + O_3$)

Hanst and Calvert	JPCHAX-1959-63-71	(mechanism)
Scheer, M. D.	SYMCAQ-1955-5-435	

$HC(O)OO\cdot + HOO\cdot \rightarrow HC(O)OOH + O_2$ (or $HCOO\cdot + O_2 + OH$)

Demerjian, et al.	AESTC9-1974-4-1	(review)

$HC(O)OO\cdot + HCHO \rightarrow \cdot CHO + HC(O)OOH$

Minkoff and Tipper	BOOKA7-1962-136	
Scheer, M. D.	SYMCA6-1955-5-435	
Vardanyan and Nalbandyan	KICAA8-1970-11-927	(mechanism)
Vardanyan, et al.	DKPCAG-1970-191-210	(mechanism)

$HC(O)OO\cdot + ROO\cdot \rightarrow HCOO\cdot + RO\cdot + O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$HCHO$ ($\cdot M$) $\rightarrow$ products (CH, CO, $\cdot CHO$, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Gay, et al.	JCPSA6-1965-43-4017	
Peeters, J.	ICBEAJ-1973-38-6	
Peeters and Mahnen	SYMCAQ-1973-14-133	

$HCHO + O \rightarrow$ products (CO, $\cdot CHO$, ...)

Avramenko and Kolesnikova	ZFKHA9-1956-30-581	(mechanism)
Avramenko and Lorentso	CHTEAA-1953-5-193	
Avramenko and Lorentso	ZFKHA9-1952-26-1084	
Baldwin and Cowe	TFSOA4-1962-58-1768	
Baldwin, et al.	SYMCAQ-1965-10-423	
Bufalini and Brubaker	25QIAZ-1971-225	
Cadle, et al.	CMSHAF-1974-3-115	
Daby, et al.	ACSRAL-1970-160-PHYS-122	
Dean and Kistiakowsky	JCPSA6-1971-54-1718	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Fristrom, R. M.	SYMCAQ-1963-9-560	
Hampson and Garvin	NBTNAE-1975-866-19	(review)
Herron, J. T.	IJCKBO-1969-1-527	(review)
Herron and Huie	JPCRBU-1973-2-467	(review)
Herron and Penzhorn	JPCHAX-1969-73-191	
Huie and Herron	PRKNAZ-1975-8-1	(review)
Lavrov and Evlanov	IUZTA4-1969-13-50	(review)
Lavrov and Kiyan	TPOVA7-1969-21	
Mack and Thrush	JCFTAR-1973-69-208	
Moshkina, et al.	BACCAT-1959-1654	
Niki, H.	JCPSA6-1966-45-2330	
Niki, et al.	JCPSA6-1968-48-5729	
Niki, et al.	SYMCAQ-1969-12-277	
Niki, et al.	ADCSAJ-1972-113-16	(review)
Schofield, K.	PLSSAE-1967-15-643	(review)
Slotin and Style	TFSOA4-1939-35-420	
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)

$HCHO + O_2 \rightarrow$ products (overall CO, CO_2, $\cdot CHO$, $HCOO\cdot$, ...)

Anisonyan, et al.	RJPCAR-1959-33-115	
Antonova, et al.	BACCAT-1955-711	
Asaba, et al.	SYMCAQ-1963-9-193	
Askey, P. J.	JACSAT-1930-52-974	(mechanism)
Axford and Norrish	NATUAS-1947-160-537	
Axford and Norrish	PRLAAZ-1948-192-518	
Baldwin and Walker	SYMCAQ-1973-14-241	(review)
Baldwin, et al.	SYMCAQ-1971-13-251	
Barnard, J. A.	ADCSAJ-1968-76-98	
Bell and Tipper	PRLAAZ-1957-238-256	
Bone and Gardner	PRLAAZ-1936-154-297	
De Wilde and Van Tiggelen	BSCBAG-1968-77-67	(generalized mechanism)
Drummond, L. J.	CBSTB9-1971-3-47	
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Enikolopyan, N. S.	SYMCAQ-1959-7-157	
Fort and Hinshelwood	PRLAAZ-1930-129-284	
Gay, et al.	JCPSA6-1965-43-4017	

HCHO + O_2 → products (overall CO, CO_2, •CHO, HCOO•, ...) (Cont'd)

Harding and Norrish	NATUAS-1949-163-797	
Harding and Norrish	PRLAAZ-1952-212-291	
Hay, J. M.	JCSOA9-1965-7388	
Hay and Hessam	CBFMAO-1971-16-237	
Horner, et al.	TFSOA4-1954-50-1201	
Karmilova, et al.	ZFKHA9-1956-30-798	
Karmilova, et al.	RJPCAR-1960-34-562	
Knox, J. H.	ARPCAW-1962-59-18	(review)
Lavrov, N. V.	IGNKBO-1967-27	(mechanism)
Lewis and Von Elbe	BOOKA7-1961-90	(review)
Markevich and Filippova	ZFKHA9-1957-31-2649	
Markevich and Filippova	RJPCAR-1959-33-358	
Markevich and Pecherskaya	RJPCAR-1961-35-697	
Markevich, et al.	BACCAT-1958-480	
Minkoff and Tipper	BOOKA7-1962-136	(review)
Miyama and Takeyama	JCPSA6-1964-40-2049	
Nalbandyan, A. B.	28KMA4-1973-140	
Norrish, R. G. W.	PRLAAZ-1935-150-36	
Norrish, R. G. W.	RIFPA9-1949-4-288	(mechanism)
Norrish, R. G. W.	DFSOAW-1951-10-269	(mechanism)
Norrish and Buckler	BOOKA7-1941-385	(review)
Norrish and Foord	PRLAAZ-1936-157-503	
Scheer, M. D.	JCPSA6-1955-23-1357	
Scheer, M. D.	SYMCAQ-1955-5-435	
Semenov, N. N.	PHZSAL-1932-1-546	
Semenov, N. N.	BOOKA7-1959-2-217	(review)
Semenov, N.	BOOKA7-1935-366	(review)
Snowdon and Style	TFSOA4-1939-35-426	
Sochet, L.-R.	JCPBAN-1973-70-456	
Spence, R.	JCSOA9-1936-649	
Vanpee, M.	BSCBAG-1953-62-285	
Vanpee, M.	BSCBAG-1953-62-661	
Vanpée and Grard	FUELAC-1955-34-433	
Vardanyan and Nalbandyan	KICAA8-1970-11-927	
Vardanyan, et al.	DKPCAG-1970-191-210	
Vardanyan, et al.	CBFMAO-1971-17-315	
Vardanyan, et al.	AYKZAN-1972-25-281	(review)
Vardanyan, et al.	DKPCAG-1970-191-210	
Vardanyan, et al.	CBFMAO-1974-22-153	
Von Elbe and Lewis	JACSAT-1937-59-976	(mechanism)

HCHO + O_2 + H → CO + H_2O + OH

Harding and Norrish	PRLAAZ-1952-212-291	(mechanism)
Norrish, R. G. W.	RIFPA9-1949-4-288	(mechanism)
Norrish, R. G. W.	DFSOAW-1951-10-269	(mechanism)

HCHO + H (+M) → products (CH, •CHO, $:CH_2$, ...)

Baldwin, et al.	TFSOA4-1962-58-60	(review)
DeGraff and Calvert	JACSAT-1967-89-2247	
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

HCHO + H_2 → products ($:CH_2$, CH_3•, CH_3O•, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

HCHO + OH → products (CO, •CHO, $:CH_2$, ...)

Baldwin and Cowe	TFSOA4-1962-58-1768	
Baldwin, et al.	SYMCAQ-1965-10-423	
Blundell, et al.	SYMCAQ-1965-10-445	
Bufalini and Brubaker	25QIAZ-1971-225	
Cullis, et al.	PRLAAZ-1963-276-527	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Drysdale and Lloyd	OXCRA4-1970-4-157	(review)
Drysdale and Norrish	PRLAAZ-1969-308-305	(mechanism)
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Enikolopyan, N. S.	SYMCAQ-1959-7-157	
Fristrom, R. M.	SYMCAQ-1963-9-560	
Hampson and Garvin	NBTNAE-1975-866-57	(review)
Harding and Norrish	PRLAAZ-1952-212-291	
Hay and Hessam	CBFMAO-1971-16-237	(mechanism)
Heicklen and Johnston	JACSAT-1962-84-4030	
Herron and Penzhorn	JPCHAX-1969-73-191	
Hoare, D. E.	AGAGAS-1965-86-125	
Karmilova, et al.	ZFKHA9-1956-30-798	
Karmilova, et al.	RJPCAR-1960-34-562	

HCHO + OH → products (CO, •CHO, $:CH_2$, ...) (Cont'd)

Lavrov and Evlanov	IUZTA4-1969-13-50	(review)
McKellar and Norrish	PRLAAZ-1960-254-147	
Minkoff and Tipper	BOOKA7-1962-151	(review)
Morris and Niki	JCPSA6-1971-55-1991	
Morris and Niki	JPCHAX-1971-75-3640	
Niki, et al.	ADCSAJ-1972-113-16	(review)
Norrish, R. G. W.	RIFPA9-1949-4-288	(mechanism)
Norrish, R. G. W.	DFSOAW-1951-10-269	(mechanism)
Peeters and Mahnen	SYMCAQ-1973-14-133	
Schofield, K.	PLSSAE-1967-15-643	(review)
Seery and Bowman	CBFMAO-1970-14-37	
Semenov, N. N.	BOOKA7-1959-2-217	(review)
Sochet, L.-R.	JCPBAN-1973-70-456	
Vardanyan, et al.	AYKZAN-1972-25-281	
Vardanyan, et al.	CBFMAO-1974-22-153	
Von Elbe and Lewis	JACSAT-1937-59-976	(mechanism)
Westenberg and Fristrom	JPCHAX-1961-65-591	
Westenberg and Fristrom	SYMCAQ-1965-10-473	
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)

HCHO + HOO• → products (CO, •CHO, CH_3O•, ...)

Baldwin, et al.	SYMCAQ-1971-13-251	
Bell and Tipper	PRLAAZ-1957-238-256	
Blundell, et al.	SYMCAQ-1965-10-445	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Englemen, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Enikolopyan, N. S.	SYMCAQ-1959-7-157	
Hampson and Garvin	NBTNAE-1975-866-62	(review)
Hay, J. M.	JCSOA9-1965-7388	
Hay and Hessam	CBFMAO-1971-16-237	
Hoare, D. E.	AGAGAS-1965-86-125	
Horner, et al.	TFSOA4-1954-50-1201	
Karmilova, et al.	ZFKHA9-1956-30-798	
Karmilova, et al.	RJPCAR-1960-34-562	
Lloyd, A. C.	IJCKBO-1974-6-169	(review)
McKellar and Norrish	PRLAAZ-1960-254-147	
Minkoff and Tipper	BOOKA7-1962-136	
Minkoff and Tipper	BOOKA7-1962-151	(review)
Norrish and Thomas	NATUAS-1966-210-728	(mechanism)
Schofield, K.	PLSSAE-1967-15-643	(review)
Semenov, N. N.	BOOKA7-1959-2-217	
Sochet, L.-R.	JCPBAN-1973-70-456	
Style and Summers	TFSOA4-1946-42-388	
Vardanyan and Nalbandyan	KICAA8-1970-11-927	(mechanism)
Vardanyan, et al.	DKPCAG-1970-191-210	
Vardanyan, et al.	DKPCAG-1970-193-498	
Vardanyan, et al.	AYKZAN-1972-25-281	
Vardanyan, et al.	CBFMAO-1971-17-315	
Vardanyan, et al.	CBFMAO-1974-22-153	
Von Elbe and Lewis	JACSAT-1937-59-976	(mechanism)

HCHO + H_2O → products (CH_3•, CH_3O•, CH_4, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

HCHO + CH → •CHO + $:CH_2$ (or CO + CH_3•)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

HCHO + $:CH_2$ → products (•CHO, CH_3O•, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

HCHO + CH_3• → products (•CHO, CH_3O•...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Pearson, G. S.	JPCHAX-1963-67-1686	

HCHO + •CHO → CH_3• + CO_2 (or CO + CH_3O•)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

HCHO + HCOO• → •CHO + HCOOH

Hanst and Calvert	JPCHAX-1959-63-71	(mechanism)

$HCHO + HC(O)OO\cdot \rightarrow \cdot CHO + HC(O)OOH$

Minkoff and Tipper	BOOKA7-1962-136	
Scheer, M. D.	SYMCAQ-1955-5-435	
Vardanyan and Nalbandyan	KICAA8-1970-11-927	(mechanism)
Vardanyan, et al.	DKPCAG-1970-191-210	(mechanism)

$HCHO + HCHO \rightarrow \cdot CHO + CH_3O\cdot$

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$HCHO + R\cdot \rightarrow \cdot CHO + RH$

Baldwin, et al.	TFSOA4-1960-56-802	
DeGraff and Calvert	JACSAT-1967-89-2247	
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Hoare and Wellington	SYMCAQ-1962-8-472	
Pearson, G. S.	JPCHAX-1963-67-1686	

$HCHO + RH \rightarrow CH_3O\cdot + R\cdot$

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$HCHO + RO\cdot \rightarrow \cdot CHO + ROH$

Demerjian, et al.	AESTC9-1974-4-1	(review)
Dever and Calvert	JACSAT-1962-84-1362	
Gray, et al.	PRKNAZ-1967-4-63	(review)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Hoare and Wellington	SYMCAQ-1962-8-472	
McMillan and Calvert	OXCRA4-1965-1-83	
Pearson, G. S.	JPCHAX-1963-67-1686	

$HCOOH + O_2 \rightarrow$ products (overall)

De Wilde and Van Tiggelen	BSCBAG-1968-77-67	(generalized mechanism)

$CH_2(O\cdot)_2 + O_2 \rightarrow HOO\cdot + HCOO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$\cdot CH_2OO\cdot + O_2 \rightarrow CH_2(OO\cdot)_2$ [or $HCHO + O_3$]

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_2(OO\cdot)_2 \rightarrow CH_2(O\cdot)_2 + O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3O\cdot + (M) \rightarrow$ products (CH, HCHO, ...)

Avramenko and Kolesnikova	DANKAS-1953-89-1037	
Badrian, et al.	RJPCAR-1959-33-580	
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Gray, et al.	PRKNAZ-1967-4-63	(review)
Sochet, et al.	ADCSAJ-1968-76-111	(mechanism)

$CH_3O\cdot + O \rightarrow$ products ($\cdot CHO$, $:CH_2$, HCHO, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_3O\cdot + O_2 \rightarrow HCHO + HOO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Hampson and Garvin	NBTNAE-1975-866-70	(review)
Heicklen and Johnston	JACSAT-1962-84-4030	
Hoare and Whytock	CJCHAG-1967-45-865	
McMillan and Calvert	OXCRA4-1965-1-83	
Niki, et al.	ADCSAJ-1972-113-16	(review)
Simonaitis and Heicklen	JPCHAX-1975-79-298	

$\cdot CH_2OH + O_2 \rightarrow HCHO + HOO\cdot$ [or $\cdot CH_2(OO\cdot)OH$]

Avramenko and Kolesnikova	BACCAT-1961-545	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Hoare and Whytock	CJCHAG-1967-45-2741	
Knox, J. H.	ARPCAW-1962-59-18	(review)
Niki, et al.	ADCSAJ-1972-113-16	(review)
Wiser and Hill	SYMCAQ-1955-5-553	(mechanism)

$CH_3O\cdot + O_3 \rightarrow$ products

Simonaitis and Heicklen	JPCHAX-1975-79-298	

$CH_3O\cdot + H \rightarrow$ products ($:CH_2$, HCHO, $CH_3\cdot$, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_3O\cdot + H_2 \rightarrow CH_3\cdot + H_2O$ (or $CH_4 + OH$)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_3O\cdot + OH \rightarrow$ products (HCHO, CH_4, CH_3OOH, ...)

Cathonnet and James	JCPBAN-1973-70-1171	(mechanism)
Demerjian, et al.	AESTC9-1974-4-1	(review)
Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Heicklen and Johnston	JACSAT-1962-84-4030	(mechanism)

$CH_3O\cdot + HOO\cdot \rightarrow CH_3OH + O_2$ (or $HCOOH + H_2O$)

Demerjian, et al.	AESTC9-1974-4-1	(review)
Varkey and Sandler	CBFMAO-1969-13-223	(mechanism)

$CH_3O\cdot + H_2O \rightarrow CH_4 + HOO\cdot$

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_3O\cdot + CH \rightarrow CH_3\cdot + \cdot CHO$ [or HCHO + $:CH_2$, or $CH_4 + CO$]

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_3O\cdot + :CH_2 \rightarrow$ products ($\cdot CHO$, HCHO, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_3O\cdot + \cdot CHO \rightarrow$ products (HCHO, CH_4, ...)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)

$CH_3O\cdot + HCOO\cdot \rightarrow CH_3OH + CO_2$

Heicklen and Johnston	JACSAT-1962-84-4030	(mechanism)

$CH_3O\cdot + CH_3O\cdot \rightarrow CH_3OH + HCHO$ (or CH_3OOCH_3)

Demerjian, et al.	AESTC9-1974-4-1	(review)
Dever and Calvert	JACSAT-1962-84-1362	
Gray, et al.	PRKNAZ-1967-4-63	(review)
Hanst and Calvert	JPCHAX-1959-63-71	(mechanism)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Heicklen and Johnston	JACSAT-1962-84-4030	(mechanism)
Hoare and Wellington	SYMCAQ-1962-8-472	
Hoey and Kutschke	CJCHAG-1955-33-496	(mechanism)
Mantashyan, et al.	DKPCAG-1972-202-17	
McMillan and Calvert	OXCRA4-1965-1-83	
Parkes, D. A.	SYMCAQ-1975-15-795	
Sochet, et al.	ADCSAJ-1968-76-111	(mechanism)
Sokolova, et al.	DKCHAY-1969-185-298	
Sokolova, et al.	KICAA8-1973-14-977	(mechanism)
Thomas and Calvert	JACSAT-1962-84-4207	

$CH_3O^{\bullet} + R^{\bullet} \rightarrow HCHO + RH$ (or CH_3OR)

Engleman, V. S.	EPTSBT-1976-600/2:76:003-5/1	(review)
Gray, et al.	PRKNAZ-1967-4-63	(review)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Sochet, et al.	ADCSAJ-1968-76-111	(mechanism)
Sokolova, et al.	KICAA8-1973-14-977	
Thynne and Gray	TFSOA4-1963-59-1149	

$CH_3O^{\bullet} + RH \rightarrow CH_3OH + R^{\bullet}$ (or $CH_3ORH_2^{\bullet}$)

Antonik and Lucquin	BSCFAS-1968-2796	
Badrian, et al.	RJPCAR-1959-33-580	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Falconer, et al.	JCSOA9-1961-4285	
Gray, et al.	PRKNAZ-1967-4-63	(review)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Hoare and Wellington	SYMCAQ-1962-8-472	
Hoare and Whytock	CJCHAG-1967-45-865	
Karmilova, et al.	ZFKHA9-1956-30-798	
Lissi, et al.	IJCKBO-1975-7-625	
Mantashyan and Nalbandyan	IARKAZ-1961-14-527	
Parkes, D. A.	SYMCAQ-1975-15-795	
Shaw and Trotman-Dickenson	JCSOA9-1960-3210	
Sokolova, et al.	KICAA8-1973-14-977	(mechanism)
Thynne and Gray	TFSOA4-1963-59-1149	

$CH_3O^{\bullet} + RO^{\bullet} \rightarrow HCHO + ROH$

Thomas and Calvert	JACSAT-1962-84-4207	

$CH_3O^{\bullet} + ROO^{\bullet} \rightarrow HCHO + ROOH$

Demerjian, et al.	AESTC9-1974-4-1	(review)
Dever and Calvert	JACSAT-1962-84-1362	
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Heicklen and Johnston	JACSAT-1962-84-4030	
Mantashyan, et al.	DKPCAG-1972-202-17	
Parkes, D. A.	SYMCAQ-1975-15-795	
Sokolova, et al.	DKCHAY-1969-185-298	
Sokolova, et al.	RZKHAR-1972-5B1168	
Sokolova, et al.	KICAA8-1973-14-977	(mechanism)

$^{\bullet}CH_2OOH \rightarrow HCHO + OH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OO^{\bullet}$ ($+M$) $\rightarrow HCHO + OH$ ($+M$) [or $CH_3^{\bullet} + O_2$ ($+M$)]

Heicklen, J.	ADCSAJ-1968-76-23	(review)
Karmilova, et al.	ZFKHA9-1956-30-798	
Kleimenov and Nalbandyan	DKPCAG-1958-122-667	
Kleimenov and Nalbandyan	DKPCAG-1959-124-5	
Kleimenov and Nalbandyan	RCBUAU-1960-11-391	
McMillan and Calvert	OXCRA4-1965-1-83	
Mantashyan and Nalbandyan	IARKAZ-1962-15-3	
Mantashyan, et al.	IARKAZ-1961-14-185	
Poroikova, et al.	KICAA8-1967-8-988	
Wiser and Hill	SYMCAQ-1955-5-553	(mechanism)

$CH_3OO^{\bullet} + O_2 \rightarrow CH_3O^{\bullet} + O_3$

Hanst and Calvert	JPCHAX-1959-63-71	(mechanism)

$CH_2(O^{\bullet})OH + O_2 \rightarrow HCOOH + HOO^{\bullet}$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$^{\bullet}CH_2OOH + O_2 \rightarrow CH_2(OO^{\bullet})OOH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OO\cdot + O_3 \rightarrow$ products

Simonaitis and Heicklen	JPCHAX-1975-79-298	

$CH_3OO\cdot + OH \rightarrow CH_3OH + O_2$ ($\cdot CH_2OO\cdot + H_2O$)

Heicklen, J.	ADCSAJ-1968-76-23	(review)
Heicklen and Johnston	JACSAT-1962-84-4030	

$CH_3OO\cdot + HOO\cdot \rightarrow CH_3OOH + O_2$ ($CH_3O\cdot + O_2 + OH$)

Demerjian, et al.	AESTC9-1974-4-1	(review)
Hampson and Garvin	NBTNAE-1975-866-73	(review)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Heicklen and Johnston	JACSAT-1962-84-4030	(mechanism)
Niki, et al.	ADCSAJ-1972-113-16	(review)

$CH_3OO\cdot + CH_3OO\cdot \rightarrow$ products (HCHO, $CH_3O\cdot$, CH_3OH, ...)

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Allara, et al.	ADCSAJ-1968-76-40	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Dever and Calvert	JACSAT-1962-84-1362	
Hampson and Garvin	NBTNAE-1975-866-71	(review)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Heicklen and Johnston	JACSAT-1962-84-4030	
Hoey and Kutschke	CJCHAG-1955-33-496	(mechanism)
Knox, J. H.	ARPCAW-1962-59-18	(review)
Mantashyan, et al.	DKPCAG-1972-202-17	
Niki, et al.	ADCSAJ-1972-113-16	(review)
Parkes, D. A.	SYMCAQ-1975-15-795	
Simonaitis and Heicklen	JPCHAX-1975-79-298	
Sokolova, et al.	DKCHAY-1969-185-298	
Sokolova, et al.	KICAA8-1973-14-977	(mechanism)
Vardanyan and Nalbandyan	AYKZAN-1969-22-549	

$CH_3OO\cdot + R\cdot \rightarrow CH_3O\cdot + RO\cdot$ (or CH_3OOR)

Heicklen, J.	ADCSAJ-1968-76-23	(review)

$CH_3OO\cdot + RH \rightarrow CH_3OOH + R\cdot$ (or $CH_3OORH_2\cdot$)

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Demerjian, et al.	AESTC9-1974-4-1	(review)
Falconer, et al.	JCSOA9-1961-4285	
Fisher and Tipper	NATUAS-1962-195-489	(mechanism)
Gray, J. A.	JCSOA9-1952-3150	(mechanism)
Karmilova, et al.	ZFKHA9-1956-30-798	
Kleimenov and Nalbandyan	DKPCAG-1958-122-667	
Kleimenov and Nalbandyan	DKPCAG-1959-124-5	
Kleimenov and Nalbandyan	RCBUAU-1960-11-391	
Kleimenov, et al.	ZFKHA9-1956-30-794	
Mantashyan and Nalbandyan	IARKAZ-1962-15-3	
Mantashyan, et al.	IARKAZ-1961-14-185	
Poroikova, et al.	KICAA8-1967-8-988	
Subbaratnam and Calvert	JACSAT-1962-84-1113	

$CH_3OO\cdot + RO\cdot \rightarrow$ products (CH_3OOH, ...)

Demerjian, et al.	AESTC9-1974-4-1	(review)
Dever and Calvert	JACSAT-1962-84-1362	
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Heicklen and Johnston	JACSAT-1962-84-4030	
Mantashyan, et al.	DKPCAG-1972-202-17	
Parkes, D. A.	SYMCAQ-1975-15-695	
Sokolova, et al.	DKCHAY-1969-185-298	
Sokolova, et al.	RZKHAR-1972-5B1168	
Sokolova, et al.	KICAA8-1973-14-977	(mechanism)

$CH_3OO\cdot + ROO\cdot \rightarrow CH_3O\cdot + RO\cdot + O_2$

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Allara, et al.	ADCSAJ-1968-76-40	
Baldwin and Walker	CBFMAO-1973-21-55	(review)
Parkes, D. A.	SYMCAQ-1975-15-795	

$CH_2(O^{\bullet})OOH + O_2 \rightarrow HC(O)OOH + HOO^{\bullet}$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_2(OO^{\bullet})OH + HOO^{\bullet} \rightarrow CH_2(OOH)OH + O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_2(OO^{\bullet})OH + ROO^{\bullet} \rightarrow CH_2(O^{\bullet})OH + RO^{\bullet} + O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OH + O \rightarrow$ products ($HCHO$, $CH_3O^{\bullet}$, $HCOOH$, ...)

Avramenko and Kolesnikova	DANKAS-1953-91-107	
Avramenko and Kolesnikova	BACCAT-1971-20-2562	
Avramenko, et al.	BACCAT-1961-552	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Knox, J. H.	ARPCAW-1962-59-18	(review)
LeFevre, et al.	IJCKBO-1972-4-103	
Moshkina, et al.	BACCAT-1959-1654	

$CH_3OH + O_2 \rightarrow$ products (overall)

Batten, J. J.	AJCHAS-1964-17-172	
Batten, J. J.	AJCHAS-1964-17-539	
Bell and Tipper	PRLAAZ-1957-238-256	
Bone and Gardner	PRLAAZ-1936-154-297	
Bunev, V. A.	CESWA4-1972-8-224	
Cooke, et al.	CBFMAO-1971-16-233	
De Wilde and Van Tiggelen	BSCBAG-1968-77-67	(generalized mechanism)
Enikololopyan and Bel'govskii	RJPCAR-1960-34-749	
Fort and Hinshelwood	PRLAAZ-1930-129-284	
Minkoff and Tipper	BOOKA7-1962-184	(review)
Wiser and Hill	SYMCAQ-1955-5-553	(mechanism)

$CH_3OH + OH \rightarrow {}^{\bullet}CH_2OH + H_2O$

Wiser and Hill	SYMCAQ-1955-5-553	(mechanism)

$CH_3OH + HOO^{\bullet} \rightarrow {}^{\bullet}CH_2OH + H_2O_2$

Bell and Tipper	PRLAAZ-1957-238-256	

$CH_3OOH \rightarrow HCHO + H_2O$ (or $CH_3O^{\bullet} + OH$)

Benson and O'Neal	NSRDAP-1970-21-435	(review)
Blat, et al.	ACPYAR-1939-10-273	
Fisher and Tipper	NATUAS-1962-195-489	(mechanism)
Heicklen and Johnston	JACSAT-1962-84-4030	
Kirk and Knox	TFSOA4-1960-56-1296	

$CH_3OOH + O_3 \rightarrow CH_3OH + O_2 + O_2$

Kleimenov and Nalbandyan	DKPCAG-1958-118-9	

$CH{\equiv}C^{\bullet} + O \rightarrow CH + CO$

Glass, et al.	JCPSA6-1965-42-608	
Williams and Smith	CHREAY-1970-70-267	(review)

$CH{\equiv}C^{\bullet} + O_2 \rightarrow CO + CO + H$
$\rightarrow CO_2 + CH$

Bowman and Seery	CBFMAO-1968-12-611	(mechanism)
Glass, et al.	JCPSA6-1965-42-608	
Glass, et al.	SYMCAQ-1965-10-513	(mechanism)
Matsuda, et al.	JCPSA6-1972-57-5277	
Williams and Smith	CHREAY-1970-70-267	(review)

$CH{\equiv}CH + O \rightarrow$ products ($:CH_2$, $CH{\equiv}C^{\bullet}$, $^{\bullet}CH{=}C{=}O$, ...)

Arrington, et al.	JCPSA6-1965-43-525	
Avramenko, et al.	BACCAT-1965-396	
Bradley and Tse	TFSOA4-1969-65-2685	
Brown and Thrush	TFSOA4-1967-63-630	
Browne, et al.	SYMCAQ-1969-12-1035	
Eberius, et al.	SYMCAQ-1973-14-147	
Fenimore and Jones	JCPSA6-1963-39-1514	
Frazier and Kooyman	CESCAC-1968-23-353	
Gaedtke, et al.	SYMCAQ-1973-14-295	
Glass, et al.	JCPSA6-1965-42-608	
Glass, et al.	SYMCAQ-1965-10-513	
Haller and Pimentel	JACSAT-1962-84-2855	
Herron and Huie	JPCRBU-1973-2-467	
Hoyermann, et al.	ZPCFAX-1967-55-72	
Hoyermann, et al.	ZPCFAX-1969-63-193	
Huie and Herron	PRKNAZ-1975-8-1	(review)
James and Glass	JCPSA6-1969-50-2268	
Jones and Bayes	JACSAT-1972-94-6869	(mechanism)
Jones and Bayes	PRLAAZ-1973-335-547	
Jones and Bayes	SYMCAQ-1973-14-277	
Kanofsky, et al.	ACSRAL-1973-166-PHYS-140	(mechanism)
Peeters and Mahnen	BOOKA7-1973-53	
Peeters and Vinckier	SYMCAQ-1975-15-969	
Saunders and Heicklen	JPCHAX-1966-70-1950	
Schofield, K.	PLSSAE-1967-15-643	(review)
Stuhl and Niki	JCPSA6-1971-55-3954	
Sullivan and Warneck	JPCHAX-1965-69-1749	
Takahashi, S.	MDPCAW-1971-11-405	
Westenberg and de Haas	JPCHAX-1969-73-1181	
Williams and Smith	CHREAY-1970-70-267	(review)
Williamson, D. G.	JPCHAX-1971-75-4053	(mechanism)
Williamson and Bayes	JPCHAX-1969-73-1232	(mechanism)

$CH{\equiv}CH + O_2 \rightarrow$ products (overall)

Bradley and Kistiakowsky	JCPSA6-1961-35-264	
Fenimore and Jones	JCPSA6-1963-39-1514	
Gardiner, W. C., Jr.	JCPSA6-1961-35-2252	
Homer and Kistiakowsky	JCPSA6-1967-47-5290	
Karpov, V. P.	APCSC3-1971-2-157	
Kistiakowsky and Richards	JCPSA6-1962-36-1707	
Matsuda, et al.	JCPSA6-1972-57-5277	
Minkoff and Tipper	BOOKA7-1962-151	(review)
Mullins, B. P.	FUELAC-1953-32-343	
Norrish and Reagh	PRLAAZ-1940-176-429	
Semenov, N.	BOOKA7-1935-394	(review)
Shtern, V. Ya.	BOOKA7-1964	(review)
Spence and Kistiakowsky	JACSAT-1930-52-4837	
Westenberg and Fristrom	SYMCAQ-1965-10-473	
Van Wonterghem and Van Tiggelen	SYMCAO-1955-5-637	
White, D. R.	SYMCAQ-1967-11-147	
Williams and Smith	CHREAY-1970-70-267	(review)

$CH{\equiv}CH + O_3 \rightarrow$ products

DeMore, W. B.	IJCKBO-1969-1-209	

$CH{\equiv}CH + O_3 \rightarrow$ product (Cont'd)

Hanst, et al.	ACPCAT-1959-136-A7	
Schofield, K.	PLSSAE-1967-15-643	(review)
Stedman and Niki	EVLTAX-1973-4-303	

$CH{\equiv}CH + OH \rightarrow$ products ($CH_3\cdot$, $CH{\equiv}C\cdot$, ...)

Bradley and Tse	TFSOA4-1969-65-2685	
Davis, et al.	JCPSA6-1975-63-1707	
Drysdale and Lloyd	OXCRA4-1970-4-157	(review)
Eberius, et al.	SYMCAQ-1973-14-147	
Glass, et al.	JCPSA6-1965-42-608	
Glass, et al.	SYMCAQ-1965-10-513	(mechanism)
Hampson and Garvin	NBTNAE-1975-866-59	(review)
Kanofsky, et al.	ACSRAL-1973-166-PHYS-140	(mechanism)
Pastrana V. A.	DABBBA-1974-34-5448	
Schofield, K.	PLSSAE-1969-15-643	(review)
Williams and Smith	CHREAY-1970-70-267	(review)
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)

$CH{\equiv}CH + \cdot CH{=}C{=}O \rightarrow$ products

Jones and Bayes	SYMCAQ-1973-14-277	

$CH_2{=}CH\cdot + O_2 \rightarrow$ products ($\cdot CHO$, $HCHO$, $CH{\equiv}CH$, $CH_2{=}CH\cdot$, ...)

Cooke and Williams	SYMCAQ-1971-13-757	(evaluation)
Hidaka, et al.	BCSJA8-1974-47-2166	
Shtern and Polyak	DANKAS-1952-85-161	
Slagle, I. R.	DABBBA-1974-35-766	
Suzuki, et al.	ASACAW-1973-18-359	

$CH_2{=}CH_2 + O \rightarrow$ products ($HCHO$, $CH_3\cdot$, $CH_2{=}CH\cdot$, ...)

Atkinson and Cvetanović	JCPSA6-1972-56-432	
Atkinson and Pitts	CHPLBC-1974-27-467	
Avramenko and Kolesnikova	18VHAX-1955-7	
Avramenko and Kolesnikova	ZFKHA9-1956-30-581	(mechanism)
Avramenko and Kolesnikova	BACCAT-1971-20-2556	
Avramenko, et al.	BACCAT-1963-30	
Baldwin and Walker	XADRCH-1968-AD 678631	
Bradley, et al.	JCFTAR-1973-69-1889	
Brown and Thrush	TFSOA4-1967-63-630	
Cvetanović, R. J.	JCPSA6-1955-23-1375	
Cvetanović, R. J.	JCPSA6-1956-25-376	
Cvetanović, R. J.	JCPSA6-1959-30-19	
Cvetanović, R. J.	JCPSA6-1960-33-1063	
Cvetanović, R. J.	CJCHAG-1960-38-1678	(review)
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
Davis, et al.	JCPSA6-1972-56-4868	
DeMore, W. B.	CHPLBC-1972-16-608	
Elias, L.	JCPSA6-1963-38-989	
Elias and Schiff	CJCHAG-1960-38-1657	
Eusuf and Wagner	BBPCAX-1972-76-437	(mechanism)
Fenimore and Jones	SYMCAQ-1963-9-597	
Ford and Endow	JCPSA6-1957-27-1277	
Furuyama, et al.	IJCKBO-1974-6-741	
Gaedtke, et al.	SYMCAQ-1973-14-295	
Hampson and Garvin	NBTNAE-1975-866-19	(review)
Havel, J. J.	JACSAT-1974-96-530	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Jaffe and Keith	JCPSA6-1968-48-2805	
Kanofsky and Gutman	CHPLBC-1972-15-236	
Kanofsky, et al.	SYMCAQ-1973-14-285	
Kurylo and Huie	JCPSA6-1973-58-1258	
Niki, et al.	JCPSA6-1968-48-5729	
Niki, et al.	SYMCAQ-1969-12-277	
Norrish, R. G. W.	RIFPA9-1949-4-288	
Peeters and Mahnen	BOOKA7-1973-53	
Ponomarev, A. N.	KICAA8-1966-7-214	
Saunders and Heicklen	JPCHAX-1966-70-1950	
Schofield, K.	PLSAAE-1967-15-643	(review)
Slagle, et al.	SYMCAQ-1975-15-785	
Slagle, et al.	IJCKBO-1974-6-111	
Stuhl and Niki	JCPSA6-1971-55-3954	
Stuhl and Niki	JCPSA6-1972-57-5403	
Tanaka, et al.	JETAAK-1967-5-62	
Thrush, B. A.	BBPCAX-1968-72-966	(mechanism)

$CH_2{=}CH_2$ + O → products (HCHO, $CH_3^{\bullet}$, $CH_2{=}CH^{\bullet}$, ...) (Cont'd)

Washida and Bayes	CHPLBC-1973-23-373	
Westenberg and de Haas	SYMCAQ-1969-12-289	

$CH_2{=}CH_2$ + O_2 → products (overall)

Falconer, et al.	JCSOA9-1961-782	
Gay, et al.	JCPSA6-1967-47-313	
Harding and Norrish	NATUAS-1949-163-797	
Harding and Norrish	PRLAAZ-1952-212-291	
Hidaka, et al.	BCSJA8-1974-47-2166	
Homer and Kistiakowsky	JCPSA6-1967-47-5290	
Knox, J. H.	BOOKA7-1967-250	(review)
Knox and Wells	TFSOA4-1963-59-2786	
Minkoff and Tipper	BOOKA7-1962-151	(review)
Norrish, R. G. W.	RIFPA9-1949-4-288	(mechanism)
Norrish and Buckler	BOOKA7-1941-385	(review)
Norrish and Patnaik	NATUAS-1949-163-883	
Norrish and Reagh	PRLAAZ-1940-176-429	
Semenov, N.	BOOKA7-1935-339	(review)
Shtern, V. Ya.	BOOKA7-1964	(review)
Slagle, I. R.	DABBBA-1974-35-766	
Suzuki, et al.	ASACAW-1973-18-359	
Thompson and Hinshelwood	PRLAAZ-1929-125-277	
Westenberg and Fristrom	SYMCAQ-1965-10-473	
White, D. R.	SYMCAQ-1967-11-147	
Yoshizawa and Kawada	BJSEA8-1973-16-576	

$CH_2{=}CH_2$ + O_2 (+ M) → HCHO + HCHO (+ M)

Harding and Norrish	PRLAAZ-1952-212-291	

$CH_2{=}CH_2$ + O_3 → products

Becker, et al.	IJCKBO-1974-6-725	
Bufalini and Altshuller	CJCHAG-1965-43-2243	
Cadle and Schadt	JACSAT-1952-74-6002	
DeMore, W. B.	IJCKBO-1969-1-209	
Hampson and Garvin	NBTNAE-1975-866-31	(review)
Hanst, et al.	ACPCAT-1959-136-A7	
Herron and Huie	JPCHAX-1974-78-2085	
Huie and Herron	IJCKBO-1975-7-Sup. 1	
Japar, et al.	JPCHAX-1974-78-2318	
Pitts and Finlayson	XADRCH-1973-AD 763755	
Schofield, K.	PLSSAE-1967-15-643	(review)
Semenov, N.	BOOKA7-1935-339	(review)
Stedman, et al.	JPCHAX-1973-77-2511	
Vrbaski and Cvetanović	CJCHAG-1960-38-1053	
Wei and Cvetanović	CJCHAG-1963-41-913	

$CH_2{=}CH_2$ + OH → products (HCHO, $CH_2{=}CH^{\bullet}$, ...)

Baldwin and Walker	XADRCH-1968-AD 678631	
Davis, et al.	JCPSA6-1975-63-1707	
Drysdale and Lloyd	OXCRA4-1970-4-157	(review)
Greiner, N. R.	JCPSA6-1970-53-1284	
Hampson and Garvin	NBTNAE-1975-866-58	(review)
Harding and Norrish	PRLAAZ-1952-212-291	(mechanism)
Hoare and Patel	TFSOA4-1969-65-1325	
Morris and Niki	JPCHAX-1971-75-3640	
Morris, et al.	ACSRAL-1970-160-PHYS-119	
Morris, et al.	JACSAT-1971-93-3570	
Norrish, R. G. W.	RIFPA9-1949-4-288	(mechanism)
Pastrana V. A.	DABBBA-1974-34-5448	
Schofield, K.	PLSSAE-1967-15-643	(review)
Suzuki, et al.	ASACAW-1973-18-359	(mechanism)
Westenberg and Fristrom	SYMCAQ-1965-10-473	
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)

$CH_2{=}CH_2$ + HOO$^{\bullet}$ → products ($CH_3{=}CH^{\bullet}$, ...)

Baldwin and Walker	XADRCH-1968-AD 678631	
Hampson and Garvin	NBTNAE-1975-866-63	(review)
Hoare and Patel	TFSOA4-1969-65-1325	
Lloyd, A. C.	IJCKBO-1974-6-169	(review)

$CH_3CH_2^{\bullet}$ + O → products

Herron, J. T.	IJCKBO-1969-1-527	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)

$CH_3CH_2^{\bullet}$ + O_2 (+M) → products (HCHO, $CH_2{=}CH_2$, CH_3CHO, ...)

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Atkinson, et al.	JACSAT-1973-95-7592	(mechanism)
Avramenko and Kolesnikova	DANKAS-1953-89-1037	
Avramenko and Kolesnikova	BACCAT-1960-755	
Avramenko and Kolesnikova	BACCAT-1960-924	
Baker, et al.	SYMCAQ-1971-13-291	
Baldwin and Simmons	TFSOA4-1957-53-955	
Baldwin and Simmons	TFSOA4-1957-53-964	
Baldwin and Walker	SYMCAQ-1973-14-241	(review)
Baldwin, et al.	SYMCAQ-1955-5-502	
Baldwin, et al.	ADCSAJ-1968-76-124	
Baldwin, et al.	TFSOA4-1970-66-189	
Baldwin, et al.	SYMCAQ-1971-13-251	
Callear and Pereira	TFSOA4-1963-59-2774	(mechanism)
Cooke and Williams	SYMCAQ-1971-13-757	(evaluation)
Cusin and James	JCPBAN-1962-59-454	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Dingledy and Calvert	JACSAT-1963-85-856	
Finkelstein and Noyes	DFSOAW-1953-14-76	
Geisbrecht and Daubert	IEPDAW-1975-14-159	
Goldfinger, et al.	TFSOA4-1965-61-1933	
Gray, J. A.	JCSOA9-1952-3150	(mechanism)
Jolley, J. E.	JACSAT-1957-79-1537	
Knox and Wells	TFSOA4-1963-59-2801	
McMillan and Calvert	OXCRA4-1965-1-83	(review)
Niki, et al.	ADCSAJ-1972-113-16	(review)
Salooja, K. C.	CBFMAO-1965-9-33	(mechanism)
Sochet, et al.	BSCFAS-1968-3596	(mechanism)
Taylor and Kulich	IJCKBO-1973-5-455	

$CH_3CH_2^{\bullet}$ + O_3 → $CH_3CH_2O^{\bullet}$ + O_2

Atkinson, et al.	JACSAT-1973-95-7592	(mechanism)

$CH_3CH_2^{\bullet}$ + OH (+M) → products ($CH_2{=}CH_2$, CH_3CH_2OH, ...)

Avramenko and Kolesnikova	DANKAS-1953-89-1037	
Cooke and Williams	SYMCAQ-1971-13-757	(evaluation)
Greiner, N. R.	JCPSA6-1970-53-1070	

$CH_3CH_2^{\bullet}$ + RO$^{\bullet}$ → $CH_2{=}CH_2$ + ROH (or CH_3CH_2OR)

Gray, et al.	PRKNAZ-1967-4-63	(review)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
McMillan and Calvert	OXCRA4-1965-1-83	(review)

$CH_3CH_2^{\bullet}$ + RCHO → CH_3CH_3 + RC(O)$^{\bullet}$

Baldwin, et al.	SYMCAQ-1971-13-251	

CH_3CH_3 + O → products (HCHO, $CH_3^{\bullet}$, $CH_3O^{\bullet}$, $CH_2{=}CH_2$, ...)

Avramenko and Kolesnikova	DANKAS-1953-89-1037	
Avramenko and Kolesnikova	BACCAT-1955-345	
Avramenko and Kolesnikova	11RFAQ-1954-51	
Avramenko and Kolesnikova	BACCAT-1971-20-2556	
Avramenko and Kolesnikova	BACCAT-1971-20-2556	
Avramenko, et al.	BACCAT-1963-557	
Azatyan, et al.	DKCHAY-1962-147-973	
Azatyan, et al.	DKPCAG-1963-149-312	
Baldwin and Simmons	TFSOA4-1957-53-955	
Baldwin and Walker	XADRCH-1968-AD 678631	
Baldwin, et al.	TFSOA4-1970-66-189	
Baldwin, et al.	SYMCAQ-1965-10-423	
Bradley, et al.	JCSIAP-1971-326	
Hampson and Garvin	NBTNAE-1975-866-19	(review)
Herron, J. T.	IJCKBO-1969-1-527	(review)
Herron and Huie	JPCHAX-1969-73-3327	

CH_3CH_3 + O → products (HCHO, CH_3·, CH_3O·, $CH_2{=}CH_2$, ...) (Cont'd)

Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Lin and DeMore	JPCHAX-1973-77-863	(mechanism)
Mayer and Schieler	JPCHAX-1968-72-2628	(calculation)
Michaud, et al.	JPCHAX-1974-78-1457	
Papadopoulos, et al.	SYMCAQ-1971-13-281	
Saunders and Heicklen	JPCHAX-1966-70-1950	
Schofield, K.	PLSSAE-1967-15-643	(review)
Westenberg and de Haas	JCPSA6-1967-46-490	
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)

CH_3CH_3 + O_2 → products (overall)

Andreev and Neiman	ZFKHA9-1933-4-33	
Baldwin and Simmons	TFSOA4-1955-51-680	
Bone and Hill	PRLAAZ-1930-129-434	
Carabine and Knox	JCSOA9-1963-862	
Cooke and Williams	SYMCAQ-1971-13-757	
Crossley, et al.	CBFMAO-1972-19-373	
Cullis, et al.	PRLAAZ-1963-276-527	
Cusin and James	JCPBAN-1962-59-454	
Déchaux and Antonik	CHDCAQ-1974-278-101	
Enikolopian and Korolev	DKPCAG-1958-118-115	
Falconer, et al.	JCSOA9-1961-782	
Garibyan, et al.	AYKZAN-1972-25-95	
Geisbrecht and Daubert	IEPDAW-1975-14-159	
Irvine and Knox	BOOKA7-1975-733	
Jacod, et al.	CHDCAQ-1969-269-1601	
James, H.	RIFPA9-1958-13-338	
Knox, J. H.	SYMCAQ-1959-7-122	
Knox, J. H.	TFSOA4-1959-55-1362	
Knox and Norrish	TFSOA4-1954-50-928	
Knox and Wells	TFSOA4-1963-59-2786	
Knox, et al.	TFSOA4-1958-54-1509	
Kowalsky and Sadovnikov	PHZSAL-1932-1-567	
Kowalsky, et al.	PHZSAL-1932-1-451	
Lewis and Von Elbe	BOOKA7-1961-90	(review)
Locqueneux-Lefebvre and James	BSCFAS-1969-1862	
Minkoff and Tipper	BOOKA7-1962-151	(review)
Moshkina, et al.	RZKHAR-1972-5B1155	
Moshkina, et al.	KICAA8-1974-15-250	
Moshkina, et al.	DKPCAG-1974-218-987	
Mulcahy, M. F. R.	DFSOAW-1947-2-128	
Mullins, B. P.	FUELAC-1953-32-343	
Newitt and Gardner	PRLAAZ-1936-154-329	
Norrish and Reagh	PRLAAZ-1940-176-429	
Sadovnikov, P.	ZFKHA9-1937-9-575	
Sampson, R. J.	JCSOA9-1963-5095	
Semenov, N. N.	PHZSAL-1932-1-546	
Semenov, N.	BOOKA7-1935-309	(review)
Semenov, N. N.	BOOKA7-1959-2-217	(review)
Shtern, V. Ya.	BOOKA7-1964	(review)
Sochet, et al.	JCPBAN-1966-63-1555	
Taylor and Kulich	IJCKBO-1973-5-455	
Watson and Darwent	JPCHAX-1957-61-577	
Westenberg and Fristrom	SYMCAQ-1965-10-473	

CH_3CH_3 + O_3 → products

Dillemuth and Schubert	WSCPAH-1963-No. 63-22	
Morrissey, R. J.	DIASA9-1962-23-89	
Morrissey and Schubert	CBFMAO-1963-7-263	
Schofield, K.	PLSSAE-1967-15-643	(review)

CH_3CH_3 + OH → CH_3CH_2· + H_2O

Baker, et al.	SYMCAQ-1971-13-291	
Baldwin and Simmons	TFSOA4-1955-51-680	
Baldwin and Simmons	TFSOA4-1967-53-964	
Baldwin and Simmons	TFSOA4-1957-53-955	
Baldwin and Walker	XADRCH-1968-AD 678631	
Baldwin, et al.	TFSOA4-1962-58-60	
Baldwin, et al.	SYMCAQ-1955-5-502	
Baldwin, et al.	ADCSAJ-1968-76-124	
Baldwin, et al.	TFSOA4-1970-66-189	
Baldwin, et al.	SYMCAQ-1965-10-423	
Drysdale and Lloyd	OXCRA4-1970-4-157	(review)
Falconer, et al.	JCSOA9-1961-4285	

$CH_3CH_3 + OH \rightarrow CH_3CH_2\cdot + H_2O$ (Cont'd)

Fenimore and Jones	SYMCAQ-1963-9-597	
Greiner, N. R.	JCPSA6-1967-46-3389	
Greiner, N. R.	JCPSA6-1968-48-1413	
Greiner, N. R.	JCPSA6-1970-53-1070	
Greiner, N. R.	JCPSA6-1970-53-1285	
Hampson and Garvin	NBTNAE-1975-866-58	(review)
Herron, J. T.	IJCKBO-1969-1-527	(review)
Hoare and Patel	TFSOA4-1969-65-1325	
Horne and Norrish	NATUAS-1967-215-1373	
Mantashyan and Nalbandyan	IARKAZ-1961-14-527	
Papadopoulos, et al.	SYMCAQ-1971-13-281	
Schofield, K.	PLSSAE-1967-15-643	(review)
Taylor and Kulich	IJCKBO-1973-5-455	(mechanism)
Westenberg and Fristrom	SYMCAQ-1965-10-473	
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)

$CH_3CH_3 + HOO\cdot \rightarrow CH_3CH_2\cdot + H_2O_2$

Baldwin and Walker	XADRCH-1968-AD 678631	
Baldwin, et al.	TFSOA4-1970-66-189	
Baldwin, et al.	SYMCAQ-1971-13-251	
Hampson and Garvin	NBTNAE-1975-866-63	(review)
Hoare and Patel	TFSOA4-1969-65-1325	
Knox and Wells	TFSOA4-1963-59-2786	
Lloyd, A. C.	IJCKBO-1974-6-169	(review)
Schofield, K.	PLSSAE-1967-15-643	(review)
Taylor and Kulich	IJCKBO-1973-5-455	(mechanism)

$CH_3CH_3 + RO\cdot \rightarrow CH_3CH_2\cdot + ROH$

Falconer, et al.	JCSOA9-1961-4285	

$CH_3CH_3 + ROO\cdot \rightarrow CH_3CH_2\cdot + ROOH$

Falconer, et al.	JCSOA9-1961-4285	

$\cdot CH{=}C{=}O + O \rightarrow$ products

Huie and Herron	PRKNAZ-1975-8-1	(review)
Jones and Bayes	PRLAAZ-1973-335-547	
Jones and Bayes	SYMCAQ-1973-14-277	

$\cdot CH{=}C{=}O + O_2 \rightarrow$ products

Jones and Bayes	PRLAAZ-1973-335-547	

$\cdot CH{=}C{=}O + CH{\equiv}CH \rightarrow$ products

Jones and Bayes	SYMCAQ-1973-14-277	

$CH_2{=}C{=}O + O \rightarrow CH_2COO$

Carr, et al.	JCPSA6-1968-49-846	
Jones and Bayes	PRLAAZ-1973-335-547	
Mack and Thrush	JCFTAR-1974-70-187	

$CH_2{=}C{=}O + O_3 \rightarrow$ products

Hanst, et al.	ACPCAT-1959-136-A7	

$CH_2{=}C{=}O + H \rightarrow CH_3\cdot + CO$

Carr, et al.	JCPSA6-1968-49-846	

$CH_2{=}C{=}O + :CH_2 \rightarrow CH_2{=}CH_2 + CO$

Terao, et al.	JACSAT-1963-85-3919	

$CHOCHO + O_2 \rightarrow$ products

Hay, J. M.	JCSOA9-1965-7388	

$CHOCHO + HOO\cdot \rightarrow CO + \cdot CHO + H_2O_2$

Hay, J. M.	JCSOA9-1965-7388	

$CH_2{=}CH(O\cdot)$, or $\cdot CH_2CHO$ $(+M) \rightarrow CH{\equiv}CH + OH$ (or $CH_2{=}C{=}O + H$) $(+M)$

Colket, et al.	IJCKBO-1975-7-223	
Suzuki, et al.	ASACAW-1973-18-359	(mechanism)

$CH_3C(O)\cdot$ $(+M) \rightarrow CH_3\cdot + CO$ $(+M)$

Benson and O'Neal	NSRDAP-1970-21-589	(review)
Calvert, J. G.	JPCHAX-1957-61-1206	
Hoare and Whytock	CJCHAG-1967-45-2741	
Sokoloua, et al.	KICAA8-1973-14-977	(mechanism)

$CH_2{=}CH(O\cdot)$, [or $\cdot CH_2CHO$] $+ O_2 \rightarrow$ products

Polyak and Shtern	DANKAS-1954-95-1231	
Suzuki, et al.	ASACAW-1973-18-359	

$CH_3C(O)\cdot + O_2 \rightarrow CH_3C(O)OO\cdot$

Atkinson, et al.	JACSAT-1973-95-7592	(mechanism)
Demerjian, et al.	AESTC9-1974-4-1	(review)
Hoare and Wellington	SYMCAQ-1962-8-472	
Hoare and Whytock	CJCHAG-1967-45-2741	
Niki, et al.	ADCSAJ-1972-113-16	(review)
Sokolova, et al.	KICAA8-1973-14-977	(mechanism)

$CH_3C(O)\cdot + CH_3C(O)\cdot \rightarrow CH_3C(O)C(O)CH_3$

Avery and Cvetanović	JCPSA6-1965-43-3727	(mechanism)
Sokolova, et al.	KICAA8-1973-14-977	(mechanism)

$CH_3C(O)\cdot + CH_3CH(OH)\cdot \rightarrow CH_3CH(OH)C(O)CH_3$ [or $CH_3CH(O) + CH_3CH(O)$]

Kato and Cvetanović	CJCHAG-1967-45-1845	

$CH_2{=}CH(O)\cdot$, [or $\cdot CH_2CHO$] $+ RH \rightarrow CH_3CHO + R\cdot$

Polyak and Shtern	DANKAS-1954-95-1231	

$CH_3C(O)\cdot + RH \rightarrow CH_3CHO + R\cdot$

Hoare and Wellington	SYMCAQ-1962-8-472	

$CH_3COO\cdot \rightarrow CH_3\cdot + CO_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)
Niki, et al.	ADCSAJ-1972-113-16	(review)

$\cdot OCH_2CHO \rightarrow HCHO + \cdot CHO$

Demerjian, et al.	AESTC9-1974-4-1	(review)
Geisbrecht and Daubert	IEPDAW-1975-14-159	

$CH_3COO\cdot + RH \rightarrow CH_3COOH + R\cdot$

Varkey and Sandler	CBFMAO-1969-13-223	(mechanism)

$\cdot OCH_2CHO + RH \rightarrow HOCH_2CHO + R\cdot$

Geisbrecht and Daubert	IEPDAW-1975-14-159	

$CH_3C(O)OO\cdot + HOO\cdot \rightarrow CH_3C(O)OOH + O_2$ [or $CH_3COO\cdot + OH + O_2$]

Demerjian, et al.	AESTC9-1974-4-1	(review)
Niki, et al.	ADCSAJ-1972-113-16	(review)

$CH_3C(O)OO\cdot \rightarrow CH_3O\cdot + CO_2$

Sokolova, et al.	KICAA8-1973-14-977	(mechanism)

$CH_3C(O)OO\cdot + CH_3C(O)OO\cdot \rightarrow CH_3CO\cdot + CH_3CO\cdot + O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)
McDowell and Farmer	SYMCAQ-1955-5-453	
Niki, et al.	ADCSAJ-1972-113-16	(review)

$CH_3C(O)OO\cdot + CH_3CHO \rightarrow CH_3C(O)OOH + CH_3C(O)\cdot$

McDowell and Farmer	SYMCAQ-1955-5-453

$CH_3CHO \rightarrow CH_3\cdot + \cdot CHO$

Cohen, A.	XADRCH-1973-AD 769715
Colket, et al.	IJCKBO-1975-7-223
Eusuf and Wagner	BBPCAX-1972-76-437

$CH_3CHO + O \rightarrow$ products ($:CH_2$, $HCHO$, $CH_3\cdot$, $CH_3C(O)\cdot$, ...)

Avery and Cvetanović	JCPSA6-1965-43-3727	
Avramenko and Kolesnikova	BACCAT-1971-20-2562	
Awramenko and Lorenzo	CHTEAA-1953-5-193	
Avramenko and Lorentso	ZFKHA9-1952-26-1084	
Avramenko, et al.	BACCAT-1961-930	
Cadle and Allen	25QIAZ-1971-63	
Cadle and Powers	JPCHAX-1967-71-1702	
Christie and Collins	NATUAS-1968-218-1245	
Cvetanović, R. J.	CJCHAG-1956-34-775	
Cvetanović, R. J.	JCPSA6-1956-25-376	
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
Daby, et al.	ACSRAL-1970-160-PHYS-122	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Ford and Endow	JCPSA6-1957-27-1277	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Mack and Thrush	JCFTAR-1974-70-178	
Mayer and Schieler	JPCHAX-1968-72-2628	(calculation)
Niki, et al.	ADCSAJ-1972-113-16	(review)
Schofield, K.	PLSSAE-1967-15-643	(review)

$CH_3CHO + O_2 \rightarrow$ products (overall)

Antonik and Lucquin	BSCFAS-1968-4043	
Cohen, A.	XADRCH-1973-AD 769715	
Cullis, et al.	PRLAAZ-1963-276-527	
Filippova and Blyumberg	NEFTAH-1973-13-673	
Knox, J. H.	ARPCAW-1962-59-18	(review)
McDowell and Thomas	JCSOA9-1950-1462	
Minkoff and Tipper	BOOKA7-1962-136	(review)
Oganesyan, et al.	DKPCAG-1973-212-728	
Ray and Waddington	SYMCAQ-1971-13-261	
Ray, et al.	SYMCAQ-1973-14-259	
Semenov, N.	BOOKA7-1935-366	(review)
Sokolova, et al.	RJPCAR-1961-35-415	

$CH_3CHO + O_3 \rightarrow$ products

Stedman and Niki	EVLTAX-1973-4-303

$CH_3CHO + OH \rightarrow CH_3C(O)\cdot + H_2O$ (or overall)

Avery and Cvetanović	JCPSA6-1965-43-3727	(mechanism)
Demerjian, et al.	AESTC9-1974-4-1	(review)
Drysdale and Lloyd	OXCRA4-1970-4-157	(review)
Morris and Niki	JPCHAX-1971-75-3640	
Morris, et al.	JACSAT-1971-93-3570	
Morris, et al.	ACSRAL-1970-160-PHYS-119	
Schofield, K.	PLSSAE-1967-15-643	(review)

$CH_3CHO + HOO\cdot \rightarrow CH_3C(O)\cdot + H_2O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)
Knox, J. H.	ARPCAW-1962-59-18	(review)
Sokolova, et al.	RJPCAR-1961-35-415	

$CH_3CHO + R\cdot \rightarrow CH_3C(O)\cdot + RH$

Artsis, et al.	KICAA8-1972-13-1006	
Baldwin, et al.	SYMCAQ-1971-13-251	
Cohen, A.	XADRCH-1973-AD 769715	
Colket, et al.	IJCKBO-1975-7-223	
Sokolova, et al.	KICAA8-1973-14-977	(mechanism)

$CH_3CHO + CH_3C(O)OO\cdot \rightarrow CH_3C(O)\cdot + CH_3C(O)OOH$

McDowell and Farmer	SYMCAQ-1955-5-453	

$CH_3CHO + RO\cdot \rightarrow CH_3C(O)\cdot + ROH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(O\cdot)_2 + O_2 \rightarrow CH_3COO\cdot + HOO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(\cdot)OO\cdot + O_2 \rightarrow CH_3CH(OO\cdot)_2$ [or $CH_3CHO + O_3$]

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3C(O)OOH \rightarrow CH_3COO\cdot + OH$

McDowell and Farmer	SYMCAQ-1955-5-453	

$CH_3CH(OO\cdot)_2 \rightarrow CH_3CH(O\cdot)_2 + O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2O\cdot (+M) \rightarrow$ products [HCHO, CH_3CHO, ...]

Badrian, et al.	RJPCAR-1959-33-580	
Baldwin and Walker	CBFMAO-1973-21-55	(review)
Benson and O'Neal	NSRDAP-1970-21-592	(review)
Demerjian, et al.	AESTC9-1974-4-1	(review)
Geisbrecht and Daubert	IEPDAW-1975-14-159	
Gray, et al.	PRKNAZ-1967-4-63	(review)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
McMillan and Calvert	OXCRA4-1965-1-83	(review)
Poroikova and Nalbandyan	DKCHAY-1965-163-774	
Sochet, et al.	ADCSAJ-1968-76-111	(mechanism)

$CH_3CH_2O\cdot + O_2 \rightarrow CH_3CHO + HOO\cdot$

Baldwin and Walker	CBFMAO-1973-21-55	(review)
Demerjain, et al.	AESTC9-1974-4-1	(review)
Heicklen and Johnston	JACSAT-1962-84-4030	
Jolley, J. E.	JACSAT-1957-79-1537	
Niki, et al.	ADCSAJ-1972-113-16	(review)
Varkey and Sandler	CBFMAO-1969-13-223	(mechanism)

$CH_3OCH_2\cdot + O_2 \rightarrow CH_3OCH_2OO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(\cdot)OH + O_2 \rightarrow CH_3CH(OO\cdot)OH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OCH_2\cdot + OH \rightarrow CH_3O\cdot + \cdot CH_2OH$

Takezaki, et al.	BCSJA8-1966-39-1643	(mechanism)

$CH_3CH(\cdot)OH + CH_3CH(\cdot)OH \rightarrow CH_3CHO + CH_3CH_2OH$

Kato and Cvetanović	CJCHAG-1967-45-1845	

$CH_3CH_2O\cdot + RH \rightarrow CH_3CH_2OH + R\cdot$

Badrian, et al.	RJPCAR-1959-33-580	
Geisbrecht and Daubert	IEPDAW-1975-14-159	
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Moshkina, et al.	KICAA8-1974-15-250	
Poroikova and Nalbandyan	DKCHAY-1965-163-774	
Salooja, K. C.	CBFMAO-1965-9-33	(mechanism)

$CH_3CH_2O\cdot + RO\cdot \rightarrow CH_3CHO + ROH$

Gray, et al.	PRKNAZ-1967-4-63	(review)
McMillan and Calvert	OXCRA4-1965-1-83	(review)

$CH_3OOCH_2\cdot \rightarrow HCHO + CH_3O\cdot$

Benson and O'Neal	NSRDAP-1970-21-603	(review)
Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OCH_2O\cdot \rightarrow HCHO + CH_3O\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(O\cdot)OH \rightarrow CH_3\cdot + HCOOH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(\cdot)OOH \rightarrow CH_3CHO + OH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(O\cdot)OH \rightarrow HCOOH + CH_3\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2OO\cdot \rightarrow$ products [HCHO, $CH_3O\cdot$, CH_3CHO, ...]

Baldwin and Walker	CBFMAO-1973-21-55	(review)
Geisbrecht and Daubert	IEPDAW-1975-14-159	
Goldfinger, et al.	TFSOA4-1965-61-1933	
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Knox and Wells	TFSOA4-1963-59-2801	
Mantashyan and Nalbandyan	IARKAZ-1961-14-527	
Mantashyan and Nalbandyan	IARKAZ-1962-15-3	
Moshkina, et al.	KICAA8-1974-15-250	
Poroikova, et al.	KICAA8-1967-8-988	

$\cdot CH_2CH_2OOH \rightarrow CH_3CH_2OO\cdot$ [or $CH_2{=}CH_2 + HOO\cdot$]

Geisbrecht and Daubert	IEPDAW-1975-14-159	

$CH_3OOCH_2\cdot + O_2 \rightarrow CH_3OOCH_2OO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OCH_2O\cdot + O_2 \rightarrow CH_3OCHO + HOO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(\cdot)OOH + O_2 \rightarrow CH_3CH(OO\cdot)OOH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(O\cdot)OH + O_2 \rightarrow CH_3COOH + HOO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$\cdot CH_2CH_2OOH + O_2 \rightarrow \cdot OOCH_2CH_2OOH$

Geisbrecht and Daubert	IEPDAW-1975-14-159	

$CH_3CH_2OO\cdot + HOO\cdot \rightarrow CH_3CH_2O\cdot + OH + O_2$ (or $CH_3CH_2OOH + O_2$)

Baldwin and Walker	CBFMAO-1973-21-55	(review)
Callear and Pereira	TFSOA4-1963-59-2774	
Niki, et al.	ADCSAJ-1972-113-16	(review)

$CH_3CH_2OO\cdot + RH \rightarrow CH_3CH_2OOH + R\cdot$

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Baldwin and Walker	CBFMAO-1973-21-55	(review)
Geisbrecht and Daubert	IEPDAW-1975-14-159	
Gray, J. A.	JCSOA9-1952-3150	(mechanism)
Mantashyan and Nalbandyan	IARKAZ-1961-14-517	
Mantashyan and Nalbandyan	IARKAZ-1961-14-527	
Mantashyan and Nalbandyan	IARKAZ-1962-15-3	
Poroikova, et al.	KICAA8-1967-8-988	
Salooja, K. C.	CBFMAO-1965-9-33	(mechanism)

$CH_3CH_2OO\cdot + ROO\cdot \rightarrow CH_3CH_2O\cdot + RO\cdot + O_2$ [or $CH_3CHO + ROH + O_2$]

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Baldwin and Walker	CBFMAO-1973-21-55	(review)
Niki, et al.	ADCSAJ-1972-113-16	(review)

$CH_3OOCH_2O\cdot \rightarrow CH_3OO\cdot + HCHO$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OOCH_2O\cdot + O_2 \rightarrow CH_3OOCHO + HOO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(O\cdot)OOH + O_2 \rightarrow CH_3C(O)OOH + HOO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OCH_2OO\cdot + HOO\cdot \rightarrow CH_3OCH_2OOH + O_2$ (or $CH_3OCH_2O\cdot + OH + O_2$)

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OCH_2OO\cdot + ROO\cdot \rightarrow CH_3OCH_2O\cdot + RO\cdot + O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$\cdot OOCH_2CH_2OOH \rightarrow$ products ($\cdot CH_2CH_2OOH + O_2$, ...)

Geisbrecht and Daubert	IEPDAW-1975-14-159	

$CH_3OCH_3 \rightarrow CH_3\cdot + CH_3O\cdot$

Benson and O'Neal	NSRDAP-1970-21-414	(review)

$CH_3CH_2OH \rightarrow CH_3\cdot + \cdot CH_2OH$ (or $CH_3CH_2\cdot + OH$)

Lin and DeMore	JPCHAX-1973-77-863	

$CH_3OCH_3 + O \rightarrow CH_3OCH_2\cdot + OH$

Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
LeFevre, et al.	IJCKBO-1972-4-103	
Marsh and Heicklen	JPCHAX-1967-71-250	
Neumann and Jonathan	JCSPAC-1970-167	
Takezaki, et al.	BCSJA8-1966-39-1643	
Takezaki, et al.	BICRAS-1966-44-341	

$CH_3CH_2OH + O \rightarrow$ products [HCHO, CH_3CHO, $CH_3CH_2O\cdot$, ...]

Avramenko and Kolesnikova	BACCAT-1971-20-2562	
Avramenko, et al.	BACCAT-1967-19	
Dzotsenidze, et al.	AYKZAN-1967-20-983	
Herron and Huie	JPCRBU-1973-2-467	(review)

$CH_3CH_2OH + O \rightarrow$ products [HCHO, CH_3CHO, $CH_3CH_2O^{\bullet}$, ...] (Cont'd)

Huie and Herron	PRKNAZ-1975-8-1	(review)
Kato and Cvetanović	CJCHAG-1967-45-1845	

$CH_3CH_2OH + O_2 \rightarrow$ products (overall)

Cooke, et al.	CBFMAO-1971-16-233	
Cullis and Newitt	PRLAAZ-1957-242-516	
Cullis and Newitt	PRLAAZ-1956-237-530	

$CH_3OCH_3 + OH \rightarrow CH_3OCH_2^{\bullet} + H_2O$

Takezaki, et al.	BCSJA8-1966-39-1643	(mechanism)
Takezaki, et al.	BICRAS-1966-44-341	

$CH_3OOCH_3 \rightarrow CH_3O^{\bullet} + CH_3O^{\bullet}$

Benson and O'Neal	NSRDAP-1970-21-427	(review)
Gray, et al.	PRKNAZ-1967-4-63	(review)
Hanst and Calvert	JPCHAX-1959-63-104	

$CH_3CH_2OOH \rightarrow CH_3CH_2O^{\bullet} + OH$

Benson and O'Neal	NSRDAP-1970-21-436	(review)
Gray, et al.	PRKNAZ-1967-4-63	(review)
Kirk and Knox	TFSOA4-1960-56-1296	
Salooja, K. C.	CBFMAO-1965-9-33	(mechanism)

$CH_3OOCH_3 + R^{\bullet} \rightarrow {}^{\bullet}CH_2OOCH_3 + RH$

Thynne and Gray	TFSOA4-1963-59-1149	

$CH_3C{\equiv}CH + O \rightarrow$ products

Brown and Thrush	TFSOA4-1967-63-630	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Kanofsky, et al.	ACSRAL-1973-166-PHYS-140	(mechanism)

$CH_2{=}C{=}CH_2 + O \rightarrow$ products

Havel, J. J.	JACSAT-1974-96-530	

$CH_2{=}C{=}CH_2 + O_3 \rightarrow$ products

Hampson and Garvin	NBTNAE-1975-866-32	(review)
Toby, S.	JLUMA8-1973-8-94	
Toby and Toby	IJCKBO-1974-6-417	

$CH_3C{\equiv}CH + OH \rightarrow$ products

Bradley, et al.	JCFTAR-1973-69-1889	
Kanofsky, et al.	ACSRAL-1973-166-PHYS-140	(mechanism)

$CH_2{=}C{=}CH_2 + OH \rightarrow$ products

Bradley, et al.	JCFTAR-1973-69-1889	

$CH_2{=}CHCH_2\cdot + O_2 \rightarrow CH_2{=}CHCH_2OO\cdot$

Burke, et al.	CBFMAO-1963-7-83	
Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH{=}CH_2 + O \rightarrow$ products [HCHO, CH_3CHO, $CH_2{=}CHCH_2\cdot$, ...]

Altshuller, et al.	ESTHAG-1967-1-899	
Atkinson and Cvetanović	JCPSA6-1971-55-659	
Atkinson and Cvetanović	JCPSA6-1972-56-432	
Atkinson and Pitts	CHPLBC-1974-27-467	
Avramenko and Kolesnikova	18VHAX-1955-7	
Avramenko and Kolesnikova	BACCAT-1971-20-2556	
Avramenko, et al.	BACCAT-1963-30	
Azatyan, et al.	IARKAZ-1964-17-117	
Cvetanović, R. J.	CJCHAG-1958-36-623	
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
Cvetanović, R. J.	JCPSA6-1959-30-19	
Cvetanović, R. J.	CJCHAG-1960-38-1678	(review)
Demerjian, et al.	AESTC9-1974-4-1	(review)
DeMore, W. B.	CHPLBC-1972-16-608	
Furuyama, et al.	IJCKBO-1974-6-741	
Gaedtke, et al.	SYMCAQ-1973-14-295	
Havel, J. J.	JACSAT-1974-96-530	
Herron and Huie	JPCRBU-1973-2-467	(review)
Hughes, et al.	JPCHAX-1966-70-798	
Huie and Herron	PRKNAZ-1975-8-1	(review)
Jaffe and Grant	JCPSA6-1969-50-3477	
Kanofsky and Gutman	CHPLBC-1972-15-236	(mechanism)
Kanofsky, et al.	SYMCAQ-1973-14-285	(mechanism)
Klein and Scheer	JPCHAX-1968-72-616	
Kurylo, M. J.	CHPLBC-1972-14-117	
Niki, et al.	ADCSAJ-1972-113-16	(review)
Orlov and Ponomarev	KICAA8-1966-7-372	
Saunders and Heicklen	JPCHAX-1966-70-1950	
Stuhl and Niki	JCPSA6-1971-55-3954	

$CH_3CH{=}CH_2 + O_2 \rightarrow$ products (overall)

Antonik and Lucquin	BSCFAS-1968-4043	
Artsis, et al.	KICAA8-1972-13-1006	
Bawn and Skirrow	SYMCAQ-1955-5-521	
Brown and Tipper	CBFMAO-1968-12-79	
Burke, et al.	CBFMAO-1963-7-83	

$CH_3CH{=}CH_2$ + O_2 → products (overall) (Cont'd)

Carabine and Knox	JCSOA9-1963-862	
Cullis and Mulcahy	RIFPA9-1949-4-283	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Falconer, et al.	JCSOA9-1961-782	
Falconer, et al.	JCSOA9-1961-4285	
Filippova and Blyumberg	NEFTAH-1973-13-673	
Filippova and Blyumberg	NEFTAH-1974-14-612	
Filippova and Blyumberg	RZKHAR-1972-5B1154	
Korablev, et al.	NEFTAH-1974-14-742	
Lukovnikov and Neiman	DANKAS-1953-91-581	
Minkoff and Tipper	BOOKA7-1962-151	(review)
Mulcahy, M. F. R.	TFSOA4-1949-45-575	
Mullen and Skirrow	PRLAAZ-1958-244-312	
Neiman, et al.	KICAA8-1960-1-319	
Nguyen, et al.	BSCFAS-1970-2150	
Norrish and Porter	PRLAAZ-1963-272-164	
Norrish and Reagh	PRLAAZ-1940-176-429	
Polyak and Shtern	ZFKHA9-1953-27-341	
Polyak and Shtern	ZFKHA9-1953-27-631	
Seakins, M.	PRLAAZ-1961-261-281	
Seakins and Hinshelwood	PRLAAZ-1963-276-324	
Shtern, V. Ya.	BOOKA7-1964	(review)
Shtern and Polyak	DANKAS-1949-65-311	
Shtern and Polyak	DANKAS-1949-66-235	
Shtern and Polyak	DANKAS-1952-85-161	

$CH_3CH{=}CH_2$ + O_3 → products

Altshuller, et al.	ESTHAG-1967-1-899	
Becker, et al.	IJCKBO-1974-6-725	
Cadle and Schadt	JACSAT-1952-74-6002	
Cox and Penkett	JCFTAR-1972-68-1735	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Hampson and Garvin	NBTNAE-1975-866-32	(review)
Hanst, et al.	ACPCAT-1959-136-A7	
Herron and Huie	JPCHAX-1974-78-2085	
Huie and Herron	IJCKBO-1975-7-Sup. 1	
Japar, et al.	JPCHAX-1974-78-2318	
Niki, et al.	ADCSAJ-1972-113-16	(review)
Stedman, et al.	JPCHAX-1973-77-2511	
Vrhaski and Cvetanović	CJCHAG-1960-38-1053	
Wei and Cvetanović	CJCHAG-1963-41-913	

$CH_3CH{=}CH_2$ + OH → products [$CH_2{=}CHCH_2$ •, $CH_3CH(\bullet)CH_2OH$, ...]

Bradley, et al.	JCFTAR-1973-69-1889	
Burke, et al.	CBFMAO-1963-7-83	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Hampson and Garvin	NBTNAE-1975-866-59	(review)
Morris and Niki	JPCHAX-1971-75-3640	
Morris, et al.	ACSRAL-1970-160-PHYS-119	
Morris, et al.	JACSAT-1971-93-3570	
Niki, et al.	ADCSAJ-1972-113-16	(review)
Pastrana V. A.	DABBBA-1974-34-5448	
Stuhl, F.	ZENAAU-1973-28-1383	

$CH_3CH{=}CH_2$ + HOO• → $CH_2{=}CHCH_2$ • + H_2O_2 [or $CH_3CH(\bullet)CH_2OOH$]

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2CH_2$ • [or $(CH_3)_2CH$•] + O_2 → products

Aleksishvili, et al.	DKPCAG-1972-203-318	
Atkinson, et al.	JACSAT-1973-95-7592	(mechanism)
Baker, et al.	TFSOA4-1970-66-3016	
Baker, et al.	SYMCAQ-1971-13-291	
Baldwin and Walker	SYMCAQ-1973-14-241	(review)
Baldwin, et al.	SYMCAQ-1955-5-502	
Baldwin, et al.	SYMCAQ-1971-13-251	
Baldwin, et al.	JCFTAR-1973-69-826	
Brokaw and Jackson	SYMCAQ-1955-5-563	
Demerjian, et al.	AESTC9-1974-4-1	
Falconer and Knox	PRLAAZ-1959-250-493	
Fok and Nalbandyan	DANKAS-1952-86-589	(mechanism)
Knox, J. H.	TFSOA4-1959-55-1362	(mechanism)
Knox, J. H.	TFSOA4-1960-55-1225	(mechanism)
Lefebvre, M.	RIFPA9-1964-19-1	
Lefebvre and Lucquin	JCPBAN-1965-62-784	

$CH_3CH_2CH_2^{\bullet}$ [or $(CH_3)_2CH^{\bullet}$] + O_2 → products (Cont'd)

Sachyan, et al.	DKCHAY-1972-204-482	(mechanism)
Satterfield and Reid	JPCHAX-1955-59-283	
Sochet, et al.	ADCSAJ-1968-76-111	(mechanism)
Sochet, et al.	BSCFAS-1968-3596	(mechanism)

$CH_3CH_2CH_2^{\bullet}$ [or $(CH_3)_2CH^{\bullet}$] + OH → products

Greiner, N. R.	JCPSA6-1970-53-1070	

$CH_3CH_2CH_2^{\bullet}$ [or $(CH_3)_2CH^{\bullet}$] + ROO$^{\bullet}$ → products

Lefebvre, M.	RIFPA9-1964-19-1	

$CH_3CH_2CH_3$ + O → products ($CH_3CH_2CH_2^{\bullet}$, $CH_3CH_2CH_2OH$, ...)

Avramenko and Kolesnikova	11RFAQ-1954-51	
Azatyan, et al.	DANAAW-1963-36-23	
Baldwin, et al.	SYMCAQ-1965-10-423	
Herron and Huie	JPCRBU-1973-2-467	(review)
Mayer and Schieler	JPCHAX-1968-72-2628	(calculation)
Michaud, et al.	JPCHAX-1974-78-1457	
Paraskevopoulos and Cvetanović	JACSAT-1969-91-7572	
Saunders and Heicklen	JPCHAX-1966-70-1950	
Schofield, K.	PLSSAE-1967-15-643	(review)
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)
Yamazaki and Cvetanović	JCPSA6-1964-41-3703	

$CH_3CH_2CH_3$ + O_2 → products (overall)

Alaverdyan, et al.	DKCHAY-1972-204-436	
Aleksishvili, et al.	DKPCAG-1972-203-318	
Aleksishvili, et al.	KICAA8-1974-15-256	
Aleksishvili, et al.	RZKHAR-1972-3N4	
Antonik and Lucquin	BSCFAS-1968-4043	
Antonovskii and Shtern	DANKAS-1951-78-303	
Badrian, et al.	RJPCAR-1959-33-580	
Bonner and Tipper	CBFMAO-1965-9-387	
Bonner and Tipper	SYMCAQ-1965-10-145	
Brokaw and Jackson	SYMCAQ-1955-5-563	
Brown and Tipper	CBFMAO-1968-12-79	
Carabine and Knox	JCSOA9-1963-862	
Chernyak and Shtern	DANKAS-1951-78-91	
Chernyak, et al.	ZFKHA9-1954-28-240	
Crescitelli, et al.	CINMAB-1973-55-945	
Crossley, et al.	CBFMAO-1972-19-373	
Falconer and Knox	PRLAAZ-1959-250-493	
Falconer, et al.	JCSOA9-1961-782	
Falconer, et al.	JCSOA9-1961-4285	
Garibyan, et al.	AYKZAN-1972-25-95	
Griffiths, J. F.	JCCCAT-1969-483	
Irvine and Knox	BOOKA7-1975-733	
Karpov, V. P.	APCSC3-1971-2-157	
Kleimenov and Nalbandyan	DKPCAG-1958-122-635	
Knox, J. H.	SYMCAQ-1959-7-122	
Knox, J. H.	TFSOA4-1959-55-1362	
Knox, J. H.	TFSOA4-1960-56-1225	
Knox, J. H.	BOOKA7-1967-250	(review)
Knox and Norrish	PRLAAZ-1954-221-151	
Knox and Turner	JCSOA9-1965-3491	
Knox, et al.	TFSOA4-1958-54-1509	
Ksandopulo, et al.	RZKHAR-1973-9B1017	
Levy, A.	SYMCAQ-1955-5-495	
Lewis and Von Elbe	BOOKA7-1961-90	(review)
Mahajan, S.	DABBBA-1973-34-200	
Malherbe and Walsh	TFSOA4-1950-46-835	
Mantashyan, et al.	DKPCAG-1972-204-532	
Martin, et al.	COREAF-1962-254-1786	
Mulcahy, M. F. R.	DFSOAW-1947-2-128	
Myers and Bartle	AIAJAH-1969-7-1862	
Nagiev and Mamed'yarov	AZKZAU-1973-65	
Nalbandyan, A. B.	28KMA4-1972-140	
Nguyen, et al.	BSCFAS-1970-2150	
Norrish and Reagh	PRLAAZ-1940-176-429	
Ogorodnikov, et al	KICAA8-1969-10-998	(related paper)
Pease, R. N.	JACSAT-1938-60-2244	
Podgrebenkov and Kogarko	FGVZA7-1974-10-691	
Poltorak, V. A.	RJPCAR-1961-35-137	
Poltorak and Voevodskii	RJPCAR-1961-35-82	

$CH_3CH_2CH_3 + O_2 \rightarrow$ products (overall) (Cont'd)

Puechberty and Cottereau	CHDCAQ-1974-279-537	
Repa and Shtern	DANKAS-1953-91-309	
Repa and Shtern	ZFKHA9-1954-28-414	
Revzin, et al.	ZFKHA9-1954-28-985	
Sachyan, et al.	DKCHAY-1972-204-482	
Satterfield and Reid	SYMCAQ-1955-5-511	
Satterfield and Wilson	IECHAD-1954-46-1001	(mechanism)
Seakins and Hinshelwood	PRLAAZ-1963-276-324	
Semenov, N.	BOOKA7-1935-325	(review)
Semenov, N. N.	BOOKA7-1959-2-217	(review)
Shtern, V. Ya.	BOOKA7-1964	(review)
Shtern, V. Ya.	11RFAQ-1954-89	
Shvartsman, et al.	27PGA4-1970-90	
Sochet and Lucquin	JCPBAN-1965-62-796	
Sochet, et al.	JCPBAN-1966-63-1555	
Sochet, et al.	ADCSAJ-1968-76-111	
Sochet, et al.	BSCFAS-1968-3596	
Newitt and Thornes	JCSOA9-1937-1669	
Walburn, P. G.	CBFMAO-1968-12-550	
Zimont and Trushin	CESWA4-1967-3-51	

$CH_3CH_2CH_3 + O_3 \rightarrow$ products

Dardin, V. J.	DIASA9-1962-23-960	(mechanism)
Dardin and Albright	IEPDAW-1965-4-61	(mechanism)
Dillemuth and Schubert	WSCPAH-1963-No. 63-22	
Morrissey, R. J.	DIASA9-1962-23-89	
Morrissey and Schubert	CBFMAO-1963-7-263	
Schubert and Pease	JACSAT-1956-78-2044	
Schubert and Pease	JCPSA6-1956-24-919	

$CH_3CH_2CH_3 + OH \rightarrow CH_3CH_2CH_2\cdot$ [or $(CH_3)_2CH\cdot$] $+ H_2O$

Baker, et al.	TFSOA4-1970-66-3016	
Baker, et al.	SYMCAQ-1971-13-291	
Baldwin, et al.	SYMCAQ-1955-5-502	
Baldwin, et al.	SYMCAQ-1965-10-423	
Bradley, et al.	JCFTAR-1973-69-1889	
Drysdale and Lloyd	OXCRA4-1970-4-157	(review)
Greiner, N. R.	JCPSA6-1967-46-3389	
Greiner, N. R.	JCPSA6-1970-53-1070	
Sachyan, et al.	DKCHAY-1972-204-482	(mechanism)
Schofield, K.	PLSSAE-1967-15-643	(review)
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)
Yamazaki and Cvetanović	JCPSA6-1964-41-3703	

$CH_3CH_2CH_3 + HOO\cdot \rightarrow CH_3CH_2CH_2\cdot$ [or $(CH_3)_2CH\cdot$] $+ H_2O_2$

Alaverdyan, et al.	DKCHAY-1972-204-436	
Baldwin, et al.	SYMCAQ-1971-13-251	
Brokaw and Jackson	SYMCAQ-1955-5-563	
Hampson and Garvin	NBTNAE-1975-866-63	(review)
Knox, J. H.	TFSOA4-1959-55-1362	(mechanism)
Knox, J. H.	TFSOA4-1960-56-1225	(mechanism)
Lloyd, A. C.	IJCKBO-1974-6-169	(review)
Sachyan, et al.	DKCHAY-1972-204-482	(mechanism)
Sochet, et al.	ADCSAJ-1968-76-111	(mechanism)

$CH_2{=}CHCHO + O \rightarrow$ products

Cadle and Allen	25QIAZ-1971-63	

$CH_2{=}CHCHO + O_3 \rightarrow$ products

Hanst, et al.	ACPCAT-1959-136-A7	

$CH_3CH_2C(O)\cdot$ (+M) $\rightarrow CH_3CH_2\cdot + CO$ (+M)

Baldwin, et al.	SYMCAQ-1971-13-251	
Hoare and Whytock	CJCHAG-1967-45-2841	

$CH_2{=}CHCH_2O\cdot + O_2 \rightarrow CH_2{=}CHCHO + HOO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2C(O)\cdot + O_2 \rightarrow CH_3CH_2O\cdot + CO_2$

Baldwin, et al.	SYMCAQ-1971-13-251	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Hoare and Whytock	CJCHAG-1967-45-2841	

$CH_2CH{=}CH_2OO\cdot \rightarrow$ products

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3C(O)CH_2O\cdot \rightarrow HCHO + CH_3C(O)\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2COO\cdot \rightarrow CH_3CH_2\cdot + CO_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(O\cdot)CHO \rightarrow \cdot CHO + CH_3CHO$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$(CH_3)_2CO \rightarrow CH_3\cdot + CH_3C(O)\cdot$

Benson and O'Neal	NSRDAP-1970-21-416	(review)

$CH_3CH(\cdot)CH_2O\cdot \rightarrow$ products

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2CHO + O \rightarrow$ products (HCHO, CH_3CH_2COOH, ...)

Avramenko, et al.	BACCAT-1967-19	
Cadle and Allen	25QIAZ-1971-63	
Herron and Huie	JPCRBU-1973-2-467	(review)

$CH_3CH_2CHO + O_2 \rightarrow CH_3CH_2C(O)\cdot + HOO\cdot$

Baldwin and Walker	XADRCH-1968-AD 678631	
Baldwin, et al.	SYMCAQ-1971-13-251	
Baldwin, et al.	TFSOA4-1969-65-792	

$(CH_3)_2CO + O_2 \rightarrow$ products (overall)

Barnard, J. A.	ADCSAJ-1968-76-98	(review)
Barnard and Sheikh	PSIRAA-1973-16-93	

$\cdot CH_2CH_2CH_2O\cdot + O_2 \rightarrow CH_3CH(O\cdot)CH_2OO\cdot$ [or $CH_3CH(OO\cdot)CH_2O\cdot$]

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2CHO + OH \rightarrow CH_3CH_2C(O)\cdot + H_2O$

Demerjian, et al.	AESTC9-1974-4-1	(review)
Drysdale and Lloyd	OXCRA4-1970-4-157	(review)
Morris and Niki	JPCHAX-1971-75-3640	

$CH_3CH_2CHO + HOO\cdot \rightarrow CH_3CH_2C(O)\cdot + H_2O_2$

Baldwin and Walker	XADRCH-1968-AD 678631	
Baldwin, et al.	SYMCAQ-1971-13-251	
Baldwin, et al.	TFSOA4-1969-65-792	

$(CH_3)_2CO + R\cdot \rightarrow CH_3C(O)CH_2\cdot + RH$

Barnard and Cohen	TFSOA4-1968-64-396	

$CH_3CH_2CHO + R\cdot \rightarrow CH_3CH_2C(O)\cdot + RH$

Baldwin, et al.	JCFTAR-1973-69-826	

$(CH_3)_2C(O^{\bullet})_2 \rightarrow CH_3^{\bullet} + CH_3COO^{\bullet}$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$(CH_3)_2C(^{\bullet})OO^{\bullet} + O_2 \rightarrow (CH_3)_2CO + O_3$ [or $(CH_3)_2C(OO^{\bullet})_2$]

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(O^{\bullet})CH_2OO^{\bullet} \rightarrow CH_3CHO + {}^{\bullet}CH_2OO^{\bullet}$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(OO^{\bullet})CH_2O^{\bullet} \rightarrow HCHO + CH_3CH(^{\bullet})OO^{\bullet}$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$(CH_3)_2C(OO^{\bullet})_2 \rightarrow (CH_3)_2C(O^{\bullet})_2 + O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2CH_2O^{\bullet}$ [or $(CH_3)_2CHO^{\bullet}$] $\rightarrow CH_3CH_2^{\bullet} + HCHO$ [or $CH_3^{\bullet} + CH_3CHO$]

Benson and O'Neal	NSRDAP-1970-21-594	(review)
Demerjian, et al.	AESTC9-1974-4-1	(review)
Gray, et al.	PRKNAZ-1967-4-63	(review)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Lefebvre, M.	RIFPA9-1964-19-1	
Lefebvre and Lucquin	JCPBAN-1965-62-784	
Sochet, et al.	ADCSAJ-1968-76-111	(mechanism)

$CH_3CH_2CH_2O^{\bullet} + O_2 \rightarrow CH_3CH_2CH(O^{\bullet}) + HOO^{\bullet}$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(^{\bullet})CH_2OH + O_2 \rightarrow CH_3CH(OO^{\bullet})CH_2OH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(OH)CH_2^{\bullet} + O_2 \rightarrow CH_3CH(OH)CH_2OO^{\bullet}$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OCH(^{\bullet})CH_3 + O_2 \rightarrow CH_3OCH(OO^{\bullet})CH_3$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(^{\bullet})CH_2OH + O_2 \rightarrow CH_3CH(OO^{\bullet})CH_2OH$

Niki, et al.	ADCSAJ-1972-113-16	(review)

$(CH_3)_2C(^{\bullet})OH + O_2 \rightarrow (CH_3)_2C(OO^{\bullet})OH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$(CH_3)_2CHO^{\bullet} + R^{\bullet} \rightarrow (CH_3)_2CO + RH$

Heicklen, J.	ADCSAJ-1968-76-23	(review)

$CH_3CH_2CH_2O^{\bullet}$ [or $(CH_3)_2CHO^{\bullet}$] $+ RH \rightarrow CH_3CH_2CH_2OH$ [or $(CH_3)_2CHOH$] $+ R^{\bullet}$

Gray, et al.	PRKNAZ-1967-4-63	(review)
Lefebvre, M.	RIFPA9-1964-19-1	
Lefebvre and Lucquin	JCPBAN-1965-62-784	

$CH_3CH_2CH_2OO^{\bullet}$ [or $(CH_3)_2CHOO^{\bullet}$] $\rightarrow$ products

Badrian, et al.	RJPCAR-1959-33-580	
Poroikova, et al.	KICAA8-1967-8-988	
Sochet, et al.	BSCFAS-1968-3596	(mechanism)

$CH_3OOCH(\cdot)CH_3 \rightarrow CH_3O\cdot + CH_3CHO$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(O\cdot)CH_2OH \rightarrow CH_3CHO + \cdot CH_2OH$

Demerjian, et al.	AESTC9-1974-4-1	(review)
Niki, et al.	ADCSAJ-1972-113-16	(review)

$(CH_3)_2C(O\cdot)OH \rightarrow CH_3\cdot + CH_3COOH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(OH)CH_2O\cdot \rightarrow CH_3CH(OH)\cdot + HCHO$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OCH(O\cdot)CH_3 \rightarrow CH_3O\cdot + CH_3CHO$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OOCH(\cdot)CH_3 + O_2 \rightarrow CH_3OOCH(OO\cdot)CH_3$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(\cdot)CH_2OOH + O_2 \rightarrow CH_3CH(OO\cdot)CH_2OOH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2CH_2OO\cdot$ [or $(CH_3)_2CHOO\cdot$] $+ RH \rightarrow CH_3CH_2CH_2OOH$ [or $(CH_3)_2CHOOH$] $+ R\cdot$

Fok and Nalbandyan	DANKAS-1952-86-589	(mechanism)
Lefebvre, M.	RIFPA9-1964-19-1	
Lefebvre and Lucquin	JCPBAN-1965-62-784	
Locqueneux-Lefebvre, M.	BSCFAS-1966-1417	
Poroikova, et al.	KICAA8-1967-8-988	

$CH_3OOCH(O\cdot)CH_3 \rightarrow CH_3OO\cdot + CH_3CHO$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(O\cdot)CH_2OOH \rightarrow CH_3CHO + \cdot CH_2OOH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(OO\cdot)CH_2OH + HOO\cdot \rightarrow CH_3CH(OOH)CH_2OH + O_2$ [or $CH_3CH(O\cdot)CH_2OH + OH + O_2$]

Demerjian, et al.	AESTC9-1974-4-1	(review)
Niki, et al.	ADCSAJ-1972-113-16	(review)

$CH_3CH(OO\cdot)CH_2OH + ROO\cdot \rightarrow CH_3CH(O\cdot)CH_2OH + RO\cdot + O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(OO\cdot)CH_2OOH + HOO\cdot \rightarrow CH_3CH(OOH)CH_2OOH + O_2$ [or $CH_3CH(O\cdot)CH_2OOH + OH + O_2$]

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(OO\cdot)CH_2OOH + ROO\cdot \rightarrow CH_3CH(O\cdot)CH_2OOH + RO\cdot + O_2$

Niki, et al.	ADCSAJ-1972-113-16	(review)

$(CH_3)_2CHOH + O \rightarrow$ products

Herron and Huie	JPCRBU-1973-2-467	(review)
Kato and Cvetanović	CJCHAG-1968-46-235	

$CH_3CH_2CH_2OH + O_2 \rightarrow$ products

Cullis and Newitt	PRLAAZ-1960-257-402	

$(CH_3)_2CHOH + O_2 \rightarrow$ products

Burgess and Cullis	JCSOA9-1961-3401	
Burgess, et al.	JCSOA9-1961-1884	
Cullis and Newitt	PRLAAZ-1960-257-402	

$CH_3CH_2CH_2OOH$ [or $(CH_3)_2CHOOH$] $\rightarrow$ products

Benson and O'Neal	NSRDAP-1970-21-437	(review)
Gray, et al.	PRKNAZ-1967-4-63	(review)
Kirk and Knox	TFSOA4-1960-56-1296	
Locqueneux-Lefebvre, M.	BSCFAS-1966-1417	

$CH{\equiv}CC{\equiv}CH + O \rightarrow$ products [$CH{\equiv}CCH$:, $CH{\equiv}CH$, ...]

Herron and Huie	JPCRBU-1973-2-467	(review)
Niki and Weinstock	JCPSA6-1966-45-3468	

$CH_2{=}CHCH{=}CH_2 + O \rightarrow$ products [$CH_2{=}CH\cdot$, $CH_2{=}CHCHO$, ...]

Avramenko and Kolesnikova	18VHAX-1955-7	
Cvetanović, R. J.	JCPSA6-1960-33-1063	
Cvetanović, R. J.	CJCHAG-1960-38-1678	(review)
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
Cvetanović and Doyle	CJCHAG-1960-38-2187	
Havel, J. J.	JACSAT-1974-96-530	
Havel and Chan	JOCEAH-1974-39-2439	
Herron and Huie	JPCRBU-1973-2-467	(review)

$CH_2{=}C{=}CHCH_3 + O \rightarrow$ products

Havel, J. J.	JACSAT-1974-96-530	

$CH_2{=}CHCH{=}CH_2 + O_2 \rightarrow$ products

Sazonov and Ammosov	RZKHAR-1974-10B906	

$CH_2{=}CHCH{=}CH_2 + O_3 \rightarrow$ products

Becker, et al.	IJCKBO-1974-6-725	
Hampson and Garvin	NBTNAE-1975-866-32	(review)
Hanst, et al.	ACPCAT-1959-136-A7	
Japar, et al.	JPCHAX-1974-78-2318	
Vrbaski and Cvetanović	CJCHAG-1960-38-1053	

$CH_3CH{=}CHCH_2\cdot + O_2 \rightarrow CH_3CH{=}CHCH_2OO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_2{=}C(CH_3)CH_2\cdot + O_2 \rightarrow CH_2{=}C(CH_3)CH_2OO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2CH{=}CH_2 + O \rightarrow$ products

Atkinson and Cvetanović	JCPSA6-1971-55-659	
Atkinson and Cvetanović	JCPSA6-1972-56-432	
Cvetanović, R. J.	JCPSA6-1956-25-376	
Cvetanović, R. J.	JCPSA6-1959-30-19	
Cvetanović, R. J.	JCPSA6-1960-33-1063	
Cvetanović, R. J.	CJCHAG-1960-38-1678	(review)
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
DeMore, W. B.	CHPLBC-1972-16-608	
Elias, L.	JCPSA6-1963-38-989	
Ford and Endow	JCPSA6-1957-27-1277	
Furuyama, et al.	IJCKBO-1974-6-741	
Havel, J. J.	JACSAT-1974-96-530	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Huie, et al.	JPCHAX-1971-75-3092	
Huie, et al.	JPCHAX-1972-76-3311	
Jarvie and Cvetanović	CJCHAG-1959-37-529	(mechanism)
Kato and Cvetanović	CJCHAG-1967-45-1845	
Klein and Scheer	JPCHAX-1968-72-616	
Preston and Cvetanović	BBPCAX-1968-72-177	
Sato and Cvetanović	CJCHAG-1958-36-970	
Sato and Cvetanović	CJCHAG-1958-36-1668	(mechanism)
Saunders and Heicklen	JPCHAX-1966-70-1950	
Smith, I. W. M.	TFSOA4-1968-64-378	

cis- or trans-$CH_3CH{=}CHCH_3 + O \rightarrow$ products [$HCHO$, CH_3CHO, ...]

Atkinson and Cvetanović	JCPSA6-1971-55-659	

cis- or trans-$CH_3CH{=}CHCH_3$ + O → products [HCHO, CH_3CHO, ...] (Cont'd

Avramenko, et al.	BACCAT-1967-247	
Cvetanović, R. J.	JCPSA6-1956-25-376	
Cvetanović, R. J.	JCPSA6-1959-30-19	
Cvetanović, R. J.	CJCHAG-1960-38-1678	(review)
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
Davis, et al.	JCPSA6-1973-59-628	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Elias, L.	JCPSA6-1963-38-989	
Ford and Endow	JCPSA6-1957-27-1277	
Furuyama, et al.	IJCKBO-1974-6-741	
Havel, J. J.	JACSAT-1974-96-530	
Herron and Huie	JPCRBU-1973-2-467	(review)
Hughes, et al.	JPCHAX-1966-70-798	
Huie and Herron	PRKNAZ-1975-8-1	(review)
Kanofsky, et al.	SYMCAQ-1973-14-285	(mechanism)
Neumann and Jonathan	JCSPAC-1970-167	
Ray, et al.	SYMCAO-1973-14-259	(review)
Sato and Cvetanović	CJCHAG-1958-36-1668	(mechanism)
Scheer and Klein	JPCHAX-1969-73-597	
Scheer and Klein	JPCHAX-1970-74-2732	(mechanism)
Tsuchiya, et al.	KGKZA7-1970-73-2655	(mechanism)

$(CH_3)_2C{=}CH_2$ + O → products [HCHO, $(CH_3)_2CO$, ...]

Atkinson and Cvetanović	JCPSA6-1971-55-659	
Atkinson and Cvetanović	JCPSA6-1972-56-432	
Avramenko, et al.	BACCAT-1963-30	
Cvetanović, R. J.	JCPSA6-1956-25-376	
Cvetanović, R. J.	JCPSA6-1959-30-19	
Cvetanović, R. J.	JCPSA6-1960-33-1063	
Cvetanović, R. J.	CJCHAG-1960-38-1678	(review)
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
Demerjian, et al.	AESTC9-1974-4-1	(review)
Elias, L.	JCPSA6-1963-38-989	
Ford and Endow	JCPSA6-1957-27-1277	
Furuyama, et al.	IJCKBO-1974-6-741	
Havel, J. J.	JACSAT-1974-96-530	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review))
Kanofsky, et al.	SYMCAQ-1973-14-285	(mechanism)
Sato and Cvetanović	CJCHAG-1958-36-970	
Sato and Cvetanović	CJCHAG-1958-36-1668	(mechanism)
Smith, I. W. M.	TFSOA4-1968-64-378	

$CH_3CH_2CH{=}CH_2$ + O_2 → products (overall)

Baker, et al.	JCFTAR-1975-71-736	
Norrish and Porter	PRLAAZ-1963-272-164	
Sazonov and Ammosov	RZKHAR-1974-10B906	

cis- or trans-$CH_3CH{=}CHCH_3$ + O_2 → products (overall)

Bawn and Skirrow	SYMCAQ-1955-5-521	
Blundell and Skirrow	PRLAAZ-1958-244-331	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Minkoff and Tipper	BOOKA7-1962-151	(review)
Norrish and Porter	PRLAAZ-1963-272-164	
Shtern, V. Ya.	BOOKA7-1964	(review)

$(CH_3)_2C{=}CH_2$ + O_2 → products (overall)

Demerjian, et al.	AESTC9-1974-4-1	(review)
Hay, et al.	SYMCAQ-1965-10-331	
Knox, J. H.	BOOKA7-1967-250	(review)
Skirrow and Williams	PRLAAZ-1962-268-537	

$CH_3CH_2CH{=}CH_2$ + O_3 → products

Bufalini and Altshuller	CJCHAG-1965-43-2243	
Hampson and Garvin	NBTNAE-1975-866-32	(review)
Huie and Herron	IJCKBO-1975-7-Sup. 1	
Japar, et al.	JPCHAX-1974-78-2318	
Vrbaski and Cvetanović	CJCHAG-1960-38-1053	
Wei and Cvetanović	CJCHAG-1963-41-913	

cis- or trans-$CH_3CH{=}CHCH_3$ + O_3 → products

Becker, et al.	IJCKBO-1974-6-725	
Bufalini and Altshuller	CJCHAG-1965-43-2243	
Cox and Penkett	JCFTAR-1972-68-1735	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Hampson and Garvin	NBTNAE-1975-866-32	(review)
Hanst, et al.	ACPCAT-1959-136-A7	
Huie and Herron	IJCKBO-1975-7-Sup. 1	
Japar, et al.	JPCHAX-1974-78-2318	
Pitts and Finlayson	XADRCH-1973-AD 763755	
Stedman, et al.	JPCHAX-1973-77-2511	
Vrbaski and Cvetanović	CJCHAG-1960-38-1053	
Wei and Cvetanović	CJCHAG-1963-41-913	

$(CH_3)_2C{=}CH_2$ + O_3 → products

Becker, et al.	IJCKBO-1974-6-725	
Bufalini and Altshuller	CJCHAG-1965-43-2243	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Hanst, et al.	ACPCAT-1959-136-A7	
Huie and Herron	IJCKBO-1975-7-Sup. 1	
Japar, et al.	JPCHAX-1974-78-2318	
Pitts and Finlayson	XADRCH-1973-AD 763755	
Wei and Cvetanović	CJCHAG-1963-41-913	

$CH_3CH_2CH{=}CH_2$ + OH → products

Morris and Niki	JPCHAX-1971-75-3640	
Pastrana V., A.	DABBBA-1974-34-5448	

cis- or trans-$CH_3CH{=}CHCH_3$ + OH → products

Demerjian, et al.	AESTC9-1974-4-1	(review)
Morris and Niki	JPCHAX-1971-75-3640	
Pastrana V., A.	DABBBA-1974-34-5448	

$(CH_3)_2C{=}CH_2$ + OH → products

Demerjian, et al.	AESTC9-1974-4-1	(review)
Drysdale and Norrish	PRLAAZ-1969-308-305	(mechanism)
Morris and Niki	JPCHAX-1971-75-3640	

cis- or trans-$CH_3CH{=}CHCH_3$ + $HOO\cdot$ → products

Demerjian, et al.	AESTC9-1974-4-1	(review)

$(CH_3)_2C{=}CH_2$ + $HOO\cdot$ → products

Demerjian, et al.	AESTC9-1974-4-1	(review)
Hay, et al.	SYMCAQ-1965-10-331	(mechanism)
Lloyd, A. C.	IJCKBO-1974-6-169	(review)

$CH_3CH_2CH_2CH_2\cdot$ [or $CH_3CH_2CH(\cdot)CH_3$] + O_2 → products

Baker, et al.	JCFTAR-1975-71-736	
Baker, et al.	JCFTAR-1975-71-756	
Baker, et al.	SYMCAQ-1971-13-291	
Baldwin and Walker	CBFMAO-1973-21-55	(review)
Baldwin and Walker	SYMCAQ-1973-14-241	(review)
Demerjian, et al.	AESTC9-1974-4-1	
Euker, C. A., Jr.	DABBBA-1970-30-4115	
Euker and Leinroth	CBFMAO-1970-15-275	
Geisbrecht and Daubert	IEPDAW-1975-14-159	

$(CH_3)_2CHCH_2\cdot$ [or $(CH_3)_3C\cdot$] + O_2 → products

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Allara, et al.	ADCSAJ-1968-76-40	(mechanism)
Baker, et al.	SYMCAQ-1971-13-291	
Baldwin and Walker	SYMCAQ-1973-14-241	(review)
Hay, et al.	SYMCAQ-1965-10-331	(mechanism)
Slater and Calvert	ADCSAJ-1968-76-58	

$CH_3CH_2CH_2CH_2\cdot$ [or $CH_3CH_2CH(\cdot)CH_3$] + $\dot{O}H$ → products

Greiner, N. R.	JCPSA6-1970-53-1070	

$(CH_3)_3C\cdot$ + $\dot{O}H$ → $(CH_3)C\dot{O}H$

Greiner, N. R.	JCPSA6-1970-53-1070	

$CH_3CH_2CH_2CH_3$ + $\dot{O}$ → products ($H\dot{C}H\dot{O}$, $CH_3\dot{C}H\dot{O}$, ...)

Atkinson and Cvetanović	JCPSA6-1971-55-659	
Avramenko, et al.	BACCAT-1963-890	
Azatyan, et al.	DANAAW-1963-36-23	
Baldwin, et al.	SYMCAQ-1965-10-423	
Cvetanović, R. J.	JCPSA6-1955-23-1375	
Cvetanović, R. J.	JCPSA6-1956-25-376	
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
Demerjian, et al.	AESTC9-1974-4-1	(review)
Elias and Schiff	CJCHAG-1960-38-1657	
Ford and Endow	JCPSA6-1957-27-1277	
Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Marsh and Heicklen	JPCHAX-1967-71-250	
Mayer and Schieler	JPCHAX-1968-72-2628	(calculation)
Michaud, et al.	JPCHAX-1974-78-1457	
Papadopoulos, et al.	SYMCAQ-1971-13-281	
Schofield, K.	PLSSAE-1967-15-643	(review)
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)
Wright, F. J.	SYMCAQ-1965-10-387	

$(CH_3)_3CH$ + $\dot{O}$ → products [$(CH_3)_2C\dot{O}$, $(CH_3)_2CHC\dot{H}O$]

Baker, et al.	JCFTAR-1975-71-736	
Baldwin, et al.	SYMCAQ-1965-10-423	
Herron and Huie	JPCRBU-1973-2-467	(review)
Paraskevopoulos and Cvetanović	JACSAT-1969-91-7572	
Schofield, K.	PLSSAE-1967-15-643	(review)
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)
Wright, F. J.	JCPSA6-1963-38-950	(mechanism)
Wright, F. J.	SYMCAQ-1965-10-387	

$CH_3CH_2CH_2CH_3$ + $\dot{O}_2$ → products (overall)

Agasiev and Shakhtakhtinskii	AZKZAU-1969-14	
Allara and Edelson	RCTEA4-1972-45-437	(calculation)
Allara, et al.	ACPCAT-1971-16-B31	
Antonik and Lucquin	BSCFAS-1968-4043	
Atherton, et al.	SYMCAQ-1973-14-513	
Baker, et al.	JCFTAR-1975-71-736	
Baker, et al.	JCFTAR-1975-71-756	
Bardwell, J.	SYMCAQ-1955-5-529	
Berry, et al.	PRLAAZ-1970-316-377	
Berry, et al.	ADCSAJ-1968-76-86	
Blakermore, J. E.	DABBBA-1971-31-4653	
Blat, et al.	ACPYAR-1939-10-273	
Bufalini, et al.	ESTHAG-1971-5-333	
Cherneskey and Bardwell	CJCHAG-1960-38-482	
Crossley, et al.	CBFMAØ-1972-19-373	
Cullis and Mulcahy	RIFPA9-1949-4-283	
Déchaux and Lucquin	SYMCAQ-1971-13-205	
Drysdale, D. D.	CBFMAØ-1971-17-261	
Euker, C. A. Jr.	DABBBA-1970-30-4115	
Euker and Leinroth	CBFMAØ-1970-15-275	
Falconer and Van Tiggelen	SYMCAQ-1963-9-689	
Falconer, et al.	JCSØA9-1961-4285	
Kozorezov, et al.	JAPUAW-1965-38-1171	
Kuhn and Wellman	WSCPAH-1972-No. 72-41	
Lewis and Von Elbe	BØØKA7-1961-90	(review)
Malherbe and Walsh	TFSØA4-1950-46-824	
Malherbe and Walsh	TFSØA4-1950-46-835	
Mill, et al.	JACSAT-1972-94-6802	
Mulcahy, M. F. R.	DFSØAW-1947-2-128	
Mulcahy, M. F. R.	TFSØA4-1949-45-575	
Norikov and Blyumberg	BACCAT-1962-1275	
Norikov, et al.	BACCAT-1964-774	

$CH_3CH_2CH_2CH_3 + O_2 \rightarrow$ products (overall) (Cont'd)

Norikov, et al.	21RAAM-1965-410	
Rader and Weller	AICEAC-1974-20-515	
Semenov, N.	BOOKA7-1935-328	(review)
Semenov, N. N.	BOOKA7-1959-2-217	(review)
Shtern, V. Ya.	BOOKA7-1964	(review)
Shu and Bardwell	CJCHAG-1955-33-1415	
Slavinskaya, et al.	RJPCAR-1963-37-830	
Skrivan and Hoelscher	AICEAC-1959-5-348	
Sochet, et al.	JCPBAN-1966-63-1555	
Yoshizawa and Kawada	BJSEA8-1973-16-576	

$(CH_3)_3CH + O_2 \rightarrow$ products (overall)

Allara, et al.	ADCSAJ-1968-76-40	
Atherton, et al.	SYMCAQ-1973-14-513	
Brown, et al.	BOOKA7-1975-751	
Falconer and Van Tiggelen	SYMCAQ-1963-9-689	
Falconer, et al.	JCSOA9-1961-782	
Hay, et al.	SYMCAQ-1965-10-331	
Irvine and Knox	BOOKA7-1975-733	
Knox and Turner	JCSOA9-1965-3491	
Kozorezov, et al.	JAPUAW-1965-38-1171	
Luckett and Pollard	CBFMAO-1973-21-265	
Minkoff and Tipper	BOOKA7-1962-151	(review)
Mulcahy, M. F. R.	TFSOA4-1949-45-575	
Rezai, A. A.	DIASA9-1965-26-939	
Ridge, M. J.	TFSOA4-1956-52-858	
Seakins and Hinshelwood	PRLAAZ-1963-276-324	
Shtern, V. Ya.	BOOKA7-1964	(review)
Zeelenberg and Bickel	JCSOA9-1961-4014	

$CH_3CH_2CH_2CH_3 + O_3 \rightarrow$ products

Schubert and Pease	JACSAT-1956-78-2044	
Schubert and Pease	JCPSA6-1956-24-919	

$(CH_3)_3CH + O_3 \rightarrow$ products

James, H.	RIFPA9-1958-13-338	
Knox, J. H.	SYMCAQ-1959-7-122	
Schubert and Pease	JACSAT-1956-78-2044	
Schubert and Pease	JACSAT-1956-78-5553	
Schubert and Pease	JCPSA6-1956-24-919	

$CH_3CH_2CH_2CH_3 + OH \rightarrow CH_3CH_2CH_2CH_2\cdot$ [or $CH_3CH_2CH(\cdot)CH_3$] $+ H_2O$

Baker, et al.	JCFTAR-1975-71-736	
Baker, et al.	SYMCAQ-1971-13-291	
Baldwin, et al.	SYMCAQ-1965-10-423	
Demerjian, et al.	AESTC9-1974-4-1	(review)
Greiner, N. R.	JCPSA6-1970-53-1070	
Greiner, N. R.	JCPSA6-1970-53-1285	
Hampson and Garvin	NBTNAE-1975-866-60	(review)
Morris and Niki	JPCHAX-1971-75-3640	
Papadopoulos, et al.	SYMCAQ-1971-13-281	
Stuhl, F.	ZENAAU-1973-28-1383	
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	

$(CH_3)_3CH + OH \rightarrow (CH_3)_3C\cdot + H_2O$

Baker, et al.	SYMCAQ-1971-13-291	
Baldwin, et al.	SYMCAQ-1965-10-423	
Drysdale and Lloyd	OXCRA4-1970-4-157	(review)
Greiner, N. R.	JCPSA6-1967-46-3389	
Greiner, N. R.	JCPSA6-1970-53-1070	
Greiner, N. R.	JCPSA6-1970-53-1285	
Wilson, Wm. E., Jr.	JPCRBU-1972-1-535	(review)

$CH_3CH_2CH_2CH_3 + HOO\cdot \rightarrow CH_3CH_2CH_2CH_2\cdot$ [or $CH_3CH_2CH(\cdot)CH_3$] $+ H_2O_2$

Hampson and Garvin	NBTNAE-1975-866-63	(review)
Lloyd, A. C.	IJCKBO-1974-6-169	(review)

$(CH_3)_3CH + HOO\cdot \rightarrow (CH_3)_3C\cdot + H_2O_2$

Baldwin, et al.	SYMCAQ-1971-13-251	

$(CH_3)_3CH + HOO^{\bullet} \rightarrow (CH_3)_3C^{\bullet} + H_2O_2$ (Cont'd)

Hampson and Garvin	NBTNAE-1975-866-63	(review)
Lloyd, A. C.	IJCKB0-1974-6-169	(review)

cis- or trans-$CH_3CH{=}CHCHO + O_2 \rightarrow$ products

Cadle, et al.	CMSHAF-1974-3-115
Minkoff and Tipper	B00KA7-1962-136

cis- or trans-$CH_3CH{=}CHCHO + O_3 \rightarrow$ products

Hanst, et al.	ACPCAT-1959-136-A7

$CH_3CH_2CH_2C(O)^{\bullet} + O_2 \rightarrow CH_3CH_2CH_2C(O)OO^{\bullet}$

Demerjian, et al.	AESTC9-1974-4-1

$CH_3C(O)CH(^{\bullet})CH_3 + O_2 \rightarrow CH_3C(O)CH(OO^{\bullet})CH_3$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH{=}CHCH_2OO^{\bullet} \rightarrow$ products

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_2{=}C(CH_3)CH_2OO^{\bullet} \rightarrow$ products

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2CH_2CHOO^{\bullet} \rightarrow CH_3CH_2CH_2^{\bullet} + CO_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3C(O)CH(O^{\bullet})CH_3 + O_2 \rightarrow CH_3C(O)C(O)CH_3 + HOO^{\bullet}$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(^{\bullet})CH(O^{\bullet})CH_3 \rightarrow$ products

Demerjian, et al.	AESTC9-1974-4-1

$(CH_3)_2C(^{\bullet})CH_2O^{\bullet} \rightarrow$ products

Demerjian, et al.	AESTC9-1974-4-1

$CH_3CH_2C(O)CH_3 + O_2 \rightarrow$ products (overall)

Bardwell, J.	PRLAAZ-1951-207-470	
Bardwell and Hinshelwood	PRLAAZ-1950-201-26	
Bardwell and Hinshelwood	PRLAAZ-1951-205-375	
Bardwell and Hinshelwood	PRLAAZ-1951-207-461	
Barnard, J. A.	ADCSAJ-1968-76-98	
Barnard and Sheikh	PSIRAA-1973-16-93	
Minkoff and Tipper	B00KA7-1962-184	(review)
Seakins and Hinshelwood	PRLAAZ-1963-276-324	
Shtern, V. Ya.	B00KA7-1964	(review)

$CH_3CH(O^{\bullet})CH(^{\bullet})CH_3 + O_2 \rightarrow CH_3CH(O^{\bullet})CH(OO^{\bullet})CH_3$

Demerjian, et al.	AESTC9-1974-4-1

$(CH_3)_2C(^{\bullet})CH_2O^{\bullet} + O_2 \rightarrow (CH_3)_2C(O^{\bullet})CH_2OO^{\bullet}$ [or $(CH_3)_2C(OO^{\bullet})CH_2O^{\bullet}$]

Demerjian, et al.	AESTC9-1974-4-1

$CH_3CH_2CH_2CHO + OH \rightarrow CH_3CH_2CH_2C(O)^{\bullet} + H_2O$

Demerjian, et al.	AESTC9-1974-4-1

$CH_3CH_2C(O)CH_3 + OH \rightarrow CH_3COCH(^{\bullet})CH_3 + H_2O$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2CH_2CHO + HOO\cdot \rightarrow CH_3CH_2CH_2C(O)\cdot + H_2O_2$
Baldwin, et al. SYMCAQ-1971-13-251

$CH_3C(O)OCH_2CH_3 + O_2 \rightarrow$ products
Fish and Waris JCSOA9-1962-4513

$CH_3CH(O\cdot)CH(OO\cdot)CH_3 \rightarrow CH_3CHO + CH_3C(\cdot)H(OO\cdot)$
Demerjian, et al. AESTC9-1974-4-1

$(CH_3)_2C(O\cdot)CH_2(OO\cdot) \rightarrow (CH_3)_2CO + \cdot CH_2OO\cdot$
Demerjian, et al. AESTC9-1974-4-1

$(CH_3)_2C(OO\cdot)CH_2O\cdot \rightarrow (CH_3)_2C(\cdot)(OO\cdot) + HCHO$
Demerjian, et al. AESTC9-1974-4-1

$CH_3CH_2OCH_2CH_2\cdot \rightarrow CH_3CH_2O\cdot + CH_2{=}CH_2$
Salooja, R. C. CBFMAO-1965-9-33 (mechanism)

$CH_3CH_2CH_2CH_2O\cdot$ [or $CH_3CH_2CH(O\cdot)CH_3$] $\rightarrow CH_3CH_2CH_2\cdot + HCHO$ [or $CH_3CH_2\cdot + CH_3CHO$]
Benson and O'Neal NSRDAP-1970-21-596 (review)
Demerjian, et al. AESTC9-1974-4-1 (review)
Mill, et al. JACSAT-1972-94-6802

$CH_3CH_2OCH(\cdot)CH_3 \rightarrow CH_3CH_2\cdot + CH_3CHO$
Benson and O'Neal NSRDAP-1970-21-600 (review)
Salooja, K. C. CBFMAO-1965-9-33 (mechanism)

$(CH_3)_3CO\cdot (+M) \rightarrow (CH_3)_2CO + CH_3\cdot (+M)$
Allara, et al. IJCKBO-1972-4-345 (calculation)
Benson and O'Neal NSRDAP-1970-21-597 (review)
Gray, et al. PRKNAZ-1967-4-63 (review)
Heicklen, J. ADCSAJ-1968-76-23 (review)
Hoare and Wellington SYMCAQ-1962-8-472
Parkes, D. A. SYMCAQ-1975-15-795
Thomas and Calvert JACSAT-1962-84-4207

$CH_3CH_2CH_2CH_2O\cdot$ [or $CH_3CH_2CH(O\cdot)CH_3$] $+ O_2 \rightarrow CH_3CH_2CH_2CHO$ [or $CH_3CH_2C(O)CH_3$] $+ HOO$
Demerjian, et al. AESTC9-1974-4-1

$(CH_3)_3CO\cdot + O_2 \rightarrow (CH_3)_2CO + CH_3OO\cdot$
Hoare and Wellington SYMCAQ-1962-8-472

$CH_3CH(OH)CH(\cdot)CH_3 + O_2 \rightarrow CH_3CH(OH)CH(OO\cdot)CH_3$
Demerjian, et al. AESTC9-1974-4-1

$CH_3CH_2OCH(\cdot)CH_3 + O_2 \rightarrow CH_3CH_2OCH(OO\cdot)CH_3$
Salooja, K. C. CBFMAO-1965-9-33 (mechanism)

$CH_3OCH_2CH(\cdot)CH_3 + O_2 \rightarrow CH_3OCH_2CH(OO\cdot)CH_3$
Demerjian, et al. AESTC9-1974-4-1 (review)

$(CH_3)_2C(\cdot)CH_2OH + O_2 \rightarrow (CH_3)_2C(OO\cdot)CH_2OH$
Demerjian, et al. AESTC9-1974-4-1 (review)

$(CH_3)_2C(OH)CH_2\cdot + O_2 \rightarrow (CH_3)_2C(OH)CH_2OO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$(CH_3)_3CO\cdot + (CH_3)_3CO\cdot \rightarrow (CH_3)_3COOC(CH_3)_3$

Gray, et al.	PRKNAZ-1967-4-63	(review)

$(CH_3)_3CO\cdot + R\cdot \rightarrow (CH_3)_3COR$

Gray, et al.	PRKNAZ-1967-4-63	(review)
Heicklen, J.	ADCSAJ-1968-76-23	(review)

$CH_3CH_2CH(O\cdot)CH_3 + RH \rightarrow CH_3CH_2CH(OH)CH_3 + R\cdot$

Mill, et al.	JACSAT-1972-94-6802	

$(CH_3)_3CO\cdot + RH \rightarrow (CH_3)_3COH + R\cdot$

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Allara, et al.	ADCSAJ-1968-76-40	
Gray, et al.	PRKNAZ-1967-4-63	(review)
Heicklen, J.	ADCSAJ-1968-76-23	(review)
Hoare and Wellington	SYMCAQ-1962-8-472	
Parkes, D. A.	SYMCAQ-1975-15-795	

$CH_3CH_2CH_2CH_2OO\cdot$ [or $CH_3CH_2CH(OO\cdot)CH_3$] $\rightarrow$ products

Allara, et al.	ACPCAT-1971-27-B31	
Baker, et al.	JCFTAR-1975-71-756	
Baldwin and Walker	CBFMAO-1973-21-55	(review)
Euker, C. A., Jr.	DABBBA-1970-30-4115	
Euker and Leinroth	CBFMAO-1970-15-275	
Geisbrecht and Daubert	IEPDAW-1975-14-159	
Mill, et al.	JACSAT-1972-94-6802	
Norikov and Blyumberg	BACCAT-1962-1275	
Norikov, et al.	BACCAT-1964-774	
Norikov, et al.	21RAAM-1965-410	

$CH_3CH(OH)CH(O\cdot)CH_3 \rightarrow CH_3CH(OH)\cdot + CH_3CHO$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OCH_2CH(O\cdot)CH_3 \rightarrow CH_3OCH_2\cdot + CH_3CHO$ [or $CH_3OCH_2CHO + CH_3\cdot$]

Demerjian, et al.	AESTC9-1974-4-1	(review)

$(CH_3)_2C(O\cdot)CH_2OH \rightarrow (CH_3)_2CO + \cdot CH_2OH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$(CH_3)_2C(OH)CH_2O\cdot \rightarrow (CH_3)_2C(OH)\cdot + HCHO$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(\cdot)CH_2CH_2OOH \rightarrow CH_3CH_2CH_2CH_2OO\cdot$

Geisbrecht and Daubert	IEPDAW-1975-14-159	

$CH_3OCH_2CH(O\cdot)CH_3 + O_2 \rightarrow CH_3OCH_2C(O)CH_3 + HOO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OOCH_2CH(\cdot)CH_3 + O_2 \rightarrow CH_3OOCH_2CH(OO\cdot)CH_3$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(OOH)CH(\cdot)CH_3 + O_2 \rightarrow CH_3CH(OOH)CH(OO\cdot)CH_3$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$(CH_3)_2C(\cdot)CH_2OOH + O_2 \rightarrow (CH_3)_2C(OO\cdot)CH_2OOH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$(CH_3)_3COO\cdot + HOO\cdot \rightarrow (CH_3)_3COOH + O_2$

Bell and McDowell	CJCHAG-1961-39-1424

$CH_3CH_2CH(OO\cdot)CH_3 + RH \rightarrow CH_3CH_2CH(OOH)CH_3 + R\cdot$

Euker, C. A., Jr.	DAEBBA-1970-30-4115	
Euker and Leinroth	CBFMAO-1970-15-275	
Mill, et al.	JACSAT-1972-94-6802	
Norikov and Blyumberg	BACCAT-1962-1275	
Norikov, et al.	BACCAT-1964-774	
Norikov, et al.	21RAAM-1965-410	

$(CH_3)_2CHCH_2OO\cdot$ [or $(CH_3)_3COO\cdot$] $+ RH \rightarrow (CH_3)_2CHCH_2OOH$ [or $(CH_3)_3COOH$] $+ R\cdot$

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Allara, et al.	ADCSAJ-1968-76-40	
Burgess and Robb	TFSOA4-1958-54-1015	

$(CH_3)_2CHCH_2OO\cdot$ [or $(CH_3)_3COO\cdot$] $+ ROO\cdot \rightarrow$ products

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Allara, et al.	ADCSAJ-1968-76-40	
Benson, S. W.	JCPSA6-1964-40-1007	
Parkes, D. A.	SYMCAQ-1975-15-795	

$CH_3CH(OO\cdot)OCH_2CH_3 \rightarrow CH_3CH(OOH)OCH(\cdot)CH_3$

Salooja, K. C.	CBFMAO-1965-9-33	(mechanism)

$CH_3OOCH_2CH(O\cdot)CH_3 \rightarrow CH_3OOCH_2CHO + CH_3\cdot$ [or $CH_3OOCH_2\cdot + CH_3CHO$]

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH(O\cdot)CH(OOH)CH_3 \rightarrow CH_3CHO + CH_3CH(\cdot)OOH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$(CH_3)_2C(O\cdot)CH_2OOH \rightarrow (CH_3)_2CO + \cdot CH_2OOH$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OOCH_2CH(O\cdot)CH_3 + O_2 \rightarrow CH_3OOCH_2C(O)CH_3 + HOO\cdot$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OCH_2CH(OO\cdot)CH_3 + HOO\cdot \rightarrow CH_3OCH_2CH(OOH)CH_3$ [or $CH_3OCH_2CH(O\cdot)CH_3 + OH$] $+ O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3OCH_2CH(OO\cdot)CH_3 + ROO\cdot \rightarrow CH_3OCH_2CH(O\cdot)CH_3 + RO\cdot + O_2$

Demerjian, et al.	AESTC9-1974-4-1	(review)

$CH_3CH_2OCH_2CH_3 \rightarrow CH_2{=}CH_2 + CH_3CH_2OH$ [or $CH_3CH_2\cdot + CH_3CH_2O\cdot$]

Benson and O'Neal	NSRDAP-1970-21-415	(review)
Minkoff and Tipper	BOOKA7-1962-184	(review)

$CH_3CH_2CH_2CH_2OH + O_2 \rightarrow$ products (overall)

Cullis and Warwicker	PRLAAZ-1961-264-392

$CH_3CH_2CH(OH)CH_3 + O_2 \rightarrow$ products (overall)

Cullis and Warwicker	PRLAAZ-1961-264-392

$(CH_3)_2CHCH_2OH + O_2 \rightarrow$ products (overall)

Cullis and Warwicker	PRLAAZ-1961-264-392	

$(CH_3)_3COH + O_2 \rightarrow$ products (overall)

Cullis and Warwicker	PRLAAZ-1961-264-392	

$CH_3CH_2OCH_2CH_3 + O_2 \rightarrow CH_3CH_2OCH(\cdot)CH_3 + HOO\cdot$

Salooja, K. C.	CBFMAO-1965-9-33	(mechanism)
Shtern, V. Ya.	BOOKA7-1964	(review)

$CH_3CH_2OCH_2CH_3 + OH \rightarrow CH_3CH_2OCH_2CH_2\cdot + H_2O$

Salooja, K. C.	CBFMAO-1965-9-33	(mechanism)

$CH_3CH_2OOCH_2CH_3 \rightarrow CH_3CH_2O\cdot + CH_3CH_2O\cdot$

Benson and O'Neal	NSRDAP-1970-21-428	(review)
Blat, et al.	ACPYAR-1939-10-273	
Gray, et al.	PRKNAZ-1967-4-63	(review)

$(CH_3)_3COOH \rightarrow (CH_3)_3CO\cdot + OH$

Bell, et al.	DFSOAW-1951-10-242	
Benson, S. W.	JCPSA6-1964-40-1007	
Benson and O'Neal	NSRDAP-1970-21-438	(review)
Gray, et al.	PRKNAZ-1967-4-63	(review)
Kirk and Knox	TFSOA4-1960-56-1296	

$(CH_3)_3COOH + OH \rightarrow (CH_3)_3COO\cdot + H_2O$

Benson, S. W.	JCPSA6-1964-40-1007	

$CH_2{=}C{=}C(CH_3)_2$ + O → products

Havel, J. J.	JACSAT-1974-96-530	

$CH_3CH_2CH_2CH{=}CH_2$ + O → products

Herron and Huie	JPCRBU-1973-2-467	(review)

cis- or trans-$CH_3CH_2CH{=}CHCH_3$ + O → products

Cvetanović, R. J.	JCPSA6-1959-30-19	
Cvetanović, R. J.	CJCHAG-1960-38-1678	(review)
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
Ford and Endow	JCPSA6-1957-27-1277	
Herron and Huie	JPCRBU-1973-2-467	(review)
Scheer and Klein	JPCHAX-1970-74-2732	(mechanism)

$(CH_3)_2C{=}CHCH_3$ + O → products

Cvetanović, R. J.	JCPSA6-1960-33-1063	
Cvetanović, R. J.	CJCHAG-1960-38-1678	(review)
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
Furuyama, et al.	IJCKBO-1974-6-741	
Havel, J. J.	JACSAT-1974-96-530	
Herron and Huie	JPCRBU-1973-2-467	(review)

$CH_3CH_2CH_2CH{=}CH_2$ + O_2 → products (overall)

Chernyak and Duda	RJPCAR-1973-47-751	
Hughes and Prodhan	CBFMAO-1973-21-297	

cis- or trans-$CH_3CH_2CH{=}CHCH_3$ + O_2 → products (overall)

Hughes and Prodhan	CBFMAO-1973-21-297	

$(CH_3)_2C{=}CHCH_3$ + O_2 → products (overall)

Cullis, et al.	PRLAAZ-1961-262-318	
Huie and Herron	PRKNAZ-1975-8-1	(review)

$CH_3CH_2CH_2CH{=}CH_2$ + O_3 → products

Cadle and Schadt	JACSAT-1952-74-6002	
Hanst, et al.	ACPCAT-1959-136-A7	
Japar, et al.	JPCHAX-1974-78-2318	
Vrbaski and Cvetanović	CJCHAG-1960-38-1053	
Wei and Cvetanović	CJCHAG-1963-41-913	

cis- or trans-$CH_3CH_2CH{=}CHCH_3$ + O_3 → products

Cox and Penkett	JCFTAR-1972-68-1735	
Hanst, et al.	ACPCAT-1959-136-A7	
Vrbaski and Cvetanović	CJCHAG-1960-38-1053	
Wei and Cvetanović	CJCHAG-1963-41-913	

$(CH_3)_2C{=}CHCH_3$ + O_3 → products

Bufalini and Altshuller	CJCHAG-1965-43-2243	
Cox and Penkett	JCFTAR-1972-68-1735	
Huie and Herron	IJCKBO-1975-7-Sup. 1	
Japar, et al.	JPCHAX-1974-78-2318	
Vrbaski and Cvetanović	CJCHAG-1960-38-1053	
Wei and Cvetanović	CJCHAG-1963-41-913	

$CH_3CH_2C(CH_3){=}CH_2$ + O_3 → products

Vrbaski and Cvetanović	CJCHAG-1960-38-1053	
Wei and Cvetanović	CJCHAG-1963-41-913	

$(CH_3)_2CHCH{=}CH_2 + O_3 \rightarrow$ products

Vrbaski and Cvetanović	CJCHAG-1960-38-1053	
Wei and Cvetanović	CJCHAG-1963-41-913	

$CH_3CH_2CH_2CH{=}CH_2 + OH \rightarrow$ products

Morris and Niki	JPCHAX-1971-75-3640	

cis- or trans-$CH_3CH_2CH{=}CHCH_3 + OH \rightarrow$ products

Morris and Niki	JPCHAX-1971-75-3640	

$CH_3CH_2C(CH_3){=}CH_2 + OH \rightarrow$ products

Morris and Niki	JPCHAX-1971-75-3640	

$(CH_3)_2C{=}CHCH_3 + OH \rightarrow$ products

Morris and Niki	JPCHAX-1971-75-3640	

$CH_3CH_2CH_2CH(\cdot)CH_3 + O_2 \rightarrow CH_3CH_2CH_2CH(OO\cdot)CH_3$

Dahm and Verhoek	CBFMAO-1968-12-380	(mechanism)
Hughes and Simmons	SYMCAQ-1969-12-449	(mechanism)

$(CH_3)_2CHCH_2CH_2\cdot$ [or $(CH_3)_2CHCH(\cdot)CH_3$, or $(CH_3)_2C(\cdot)CH_2CH_3$] $+ O_2 \rightarrow$ products

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Varkey and Sandler	CBFMAO-1969-13-223	(mechanism)

$(CH_3)_3CCH_2\cdot + O_2 \rightarrow$ products

Antonik and Lucquin	BSCFAS-1968-2796	
Antonik and Lucquin	BSCFAS-1971-3139	
Baker, et al.	CBFMAO-1970-14-31	
Baldwin, et al.	ADCSAJ-1968-76-124	
Drysdale and Norrish	PRLAAZ-1969-308-305	(mechanism)
Zeelenberg, A. P.	RTCPA3-1962-81-720	

$(CH_3)_3CCH_2\cdot + OH \rightarrow (CH_3)_3CCH_2OH$

Greiner, N. R.	JCPSA6-1970-53-1070	

$CH_3CH_2CH_2CH_2CH_3 + O \rightarrow$ products

Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Michaud, et al.	JPCHAX-1974-78-1457	

$(CH_3)_2CHCH_2CH_3 + O \rightarrow$ products

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)

$(CH_3)_4C + O \rightarrow$ products

Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Michaud, et al.	JPCHAX-1974-78-1457	
Paraskevopoulos and Cvetanović	JACSAT-1969-91-7572	
Paraskevopoulos and Cvetanović	CHPLBC-1971-9-603	
Wright, F. J.	SYMCAQ-1965-10-387	

$CH_3CH_2CH_2CH_2CH_3 + O_2 \rightarrow$ products (overall)

Aivazov and Neiman	ZFKHA9-1936-8-88	
Aivazov and Neiman	ZFKHA9-1936-8-543	
Aivazov and Neiman	ACPYAR-1937-6-279	

$CH_3CH_2CH_2CH_2CH_3$ + O_2 → products (overall) (Cont'd)

Aivazov and Neiman	ZFKHA9-1937-9-231	
Bastow and Cullis	PRLAAZ-1974-338-327	
Bastow and Cullis	BOOKA7-1975-765	
Berry, et al.	ADCSAJ-1968-76-86	
Chung and Sandler	CBFMAO-1963-7-339	
Crossley, et al.	CBFMAO-1972-19-373	
Cullis and Hinshelwood	DFSOAW-1947-2-117	
Cullis, et al.	PRLAAZ-1967-300-455	
Dahm and Verhoek	CBFMAO-1968-12-380	
Hughes and Simmons	SYMCAQ-1969-12-449	
Hughes and Simmons	CBFMAO-1970-14-103	
Karbassian, et al.	BSCFAS-1973-3249	
Knox and Kinnear	SYMCAQ-1971-13-217	
Kuhn and Wellman	WSCPAH-1972-No. 72-41	
Lee and Malmberg	ACSRAL-1961-139-2J	
Lewis and Von Elbe	BOOKA7-1961-90	(review)
Malherbe and Walsh	TFSOA4-1950-46-824	
Malherbe and Walsh	TFSOA4-1950-46-835	
Mulcahy, M. F. R.	DFSOAW-1947-2-128	
Neiman and Aivazov	NATUAS-1935-135-655	
Prettre, M.	COREAF-1936-203-561	
Semenov, N.	BOOKA7-1935-332	(review)
Shtern, V. Ya.	BOOKA7-1964	(review)
Sochet, et al.	JCPBAN-1966-63-1555	

$(CH_3)_2CHCH_2CH_3$ + O_2 → products (overall)

Allara and Edelson	RCTEA4-1972-45-437	(calculation)
Degtyareva, et al.	NEFTAH-1972-12-712	
Kirik, et al.	UYTIAX-1972-22-74	
Varkey and Sandler	CBFMAO-1969-13-223	

$(CH_3)_4C$ + O_2 → products (overall)

Antonik and Lucquin	BSCFAS-1968-2796	
Antonik and Lucquin	BSCFAS-1968-4043	
Drysdale, D. D.	CBFMAO-1971-17-261	
Drysdale and Norrish	PRLAAZ-1969-308-305	
Falconer and Van Tiggelen	SYMCAQ-1963-9-689	
Falconer, et al.	JCSOA9-1961-782	
Falconer, et al.	JCSOA9-1961-4285	
Fish, A.	CBFMAO-1969-13-23	
Ray and Waddington	BOOKA7-1975-721	
Seakins and Hinshelwood	PRLAAZ-1963-276-324	
Zeelenberg, A. P.	RTCPA3-1962-81-720	

$CH_3CH_2CH_2CH_2CH_3$ + OH → $CH_3CH_2CH_2CH_2CH_2$• [or $CH_2CH_2CH_2CH(•)CH_3$, or $CH_3CH_2CH(•)CH_2$

Chung and Sandler	CBFMAO-1963-7-339	
Hughes and Simmons	SYMCAQ-1969-12-449	(mechanism)

$(CH_3)_4C$ + OH → $(CH_3)_3CCH_2$• + H_2O

Baldwin, et al.	ADCSAJ-1968-76-124	
Drysdale and Norrish	PRLAAZ-1969-308-305	(mechanism)
Greiner, N. R.	JCPSA6-1970-53-1070	
Greiner, N. R.	JCPSA6-1970-53-1285	

$CH_3CH_2CH_2CH_2CH_3$ + HOO• → $CH_3CH_2CH_2CH_2CH_2$• [or $CH_3CH_2CH_2CH(•)CH_3$, or $CH_3CH_2CH(•)C$

Hughes and Simmons	SYMCAQ-1969-12-449	(mechanism)

$CH_3CH_2C(O)CH_2CH_3$ + O_2 → products (overall)

Barnard, J. A.	ADCSAJ-1968-76-98	
Barnard and Sheikh	PSIRAA-1973-16-93	

$(CH_3)_3CCHO$ + O_2 → $(CH_3)_3C$• + CO + HOO•

Drysdale and Norrish	PRLAAZ-1969-308-305	(mechanism)

$(CH_3)_3CCHO$ + ROO• → $(CH_3)_3CC(O)$• + ROOH

Antonik and Lucquin	BSCFAS-1968-2796	
Antonik and Lucquin	BSCFAS-1971-3139	

$CH_3CH{=}CHCH(OOH)CH_3 \rightarrow CH_3CH{=}CHCHO + CH_3\cdot + OH$

Dahm and Verhoek — CBFMAO-1968-12-380 (mechanism)

$(CH_3)_2C(O\cdot)CH_2CH_3 \rightarrow$ products

Allara, et al. — IJCKBO-1972-4-345 (calculation)
Gray, et al. — PRKNAZ-1967-4-63 (review)

$(CH_3)_3CCH_2O\cdot \rightarrow$ products

Fish, A. — CBFMAO-1969-13-23 (mechanism)

$(CH_3)_2C(\cdot)CH_2OCH_3 + O_2 \rightarrow (CH_3)_2C(OO\cdot)CH_2OCH_3$

Demerjian, et al. — AESTC9-1974-4-1 (review)

$CH_3OCH(CH_3)CH(\cdot)CH_3 + O_2 \rightarrow CH_3OCH(CH_3)CH(OO\cdot)CH_3$

Demerjian, et al. — AESTC9-1974-4-1 (review)

$(CH_3)_2C(O\cdot)CH_2CH_3 + RH \rightarrow (CH_3)_2C(OH)CH_2CH_3 + R\cdot$

Allara, et al. — IJCKBO-1972-4-345 (calculation)

$(CH_3)_3CCH_2O\cdot + RH \rightarrow (CH_3)_3CCH_2OH + R\cdot$

Antonik and Lucquin — BSCFAS-1971-3139
Fish, A. — CBFMAO-1969-13-23 (mechanism)
Zeelenberg, A. P. — RTCPA3-1962-81-720

$CH_3CH_2CH_2CH(OO\cdot)CH_3$ [or $CH_3CH_2CH(OO\cdot)CH_2CH_3$] $\rightarrow$ products

Burgess and Robb — TFSOA4-1958-54-1015
Chung and Sandler — CBFMAO-1963-7-339
Dahm and Verhoek — CBFMAO-1968-12-380 (mechanism)
Hughes and Simmons — SYMCAQ-1969-12-449 (mechanism)
Knox and Kinnear — SYMCAQ-1971-13-217

$(CH_3)_2C(O\cdot)CH_2OCH_3 \rightarrow (CH_3)_2CO + CH_3OCH_2\cdot$ [or $CH_3\cdot + CH_3C(O)CH_2OCH_3$]

Demerjian, et al. — AESTC9-1974-4-1 (review)

$CH_3OCH(CH_3)CH(O\cdot)CH_3 \rightarrow CH_3OCH(\cdot)CH_3 + CH_3CHO$ [or $CH_3OCH(CH_3)CHO + CH_3\cdot$]

Demerjian, et al. — AESTC9-1974-4-1 (review)

$\cdot CH_2C(CH_3)_2CH_2OOH \rightarrow$ products

Baker, et al. — CBFMAO-1970-14-31

$(CH_3)_3CCH_2OO\cdot \rightarrow$ products

Antonik and Lucquin — BSCFAS-1968-2796
Antonik and Lucquin — BSCFAS-1971-3139
Fish, A. — CBFMAO-1969-13-23 (mechanism)
Zeelenberg, A. P. — RTCPA3-1962-81-720

$CH_3CH(\cdot)CH_2CH(OOH)CH_3 + O_2 \rightarrow$ products

Dahm and Verhoek — CBFMAO-1968-12-380 (mechanism)
Hughes and Simmons — SYMCAQ-1969-12-449 (mechanism)

$CH_3OOCH(CH_3)CH(\cdot)CH_3 + O_2 \rightarrow CH_3OOCH(CH_3)CH(OO\cdot)CH_3$

Demerjian, et al. — AESTC9-1974-4-1 (review)

$\cdot CH_2C(CH_3)_2CH_2OOH + O_2 \rightarrow$ products

Baker, et al. — CBFMAO-1970-14-31

$(CH_3)_2C(\bullet)CH_2OOCH_3 + O_2 \rightarrow (CH_3)_2C(OO\bullet)CH_2OOCH_3$

Demerjian, et al. AESTC9-1974-4-1 (review)

$CH_3CH_2CH_2CH(OO\bullet)CH_3 + RH \rightarrow CH_3CH_2CH_2CH(OOH)CH_3 + R\bullet$

Dahm and Verhoek CBFMAO-1968-12-380 (mechanism)
Knox and Kinnear SYMCAQ-1971-13-217

$(CH_3)_2CHCH_2CH_2OO\bullet$ [or $(CH_3)_2CHCH(OO\bullet)CH_3$, or $(CH_3)_2C(OO\bullet)CH_2CH_3$] + RH →
$(CH_3)_2CHCH_2CH_2OOH$ [or $(CH_3)_2CHCH(OOH)CH_3$, or $(CH_3)_2C(OOH)CH_2CH_3$] + R•

Allara, et al. IJCKBO-1972-4-345 (calculation)
Degtyareva, et al. NEFTAH-1972-12-854
Degtyareva, et al. NEFTAH-1973-13-82

$(CH_3)_3CCH_2OO\bullet + RH \rightarrow (CH_3)_3CCH_2OOH + R\bullet$

Fish, A. CBFMAO-1969-13-23 (mechanism)

$(CH_3)_2C(OO\bullet)CH_2CH_3 + ROO\bullet \rightarrow$ products

Allara, et al. IJCKBO-1972-4-345 (calculation)

$CH_3OOCH(CH_3)CH(O\bullet)CH_3 \rightarrow CH_3OOCH(\bullet)CH_3 + CH_3CHO$ [or $CH_3OOCH(CH_3)CHO + CH_3\bullet$]

Demerjian, et al. AESTC9-1974-4-1 (review)

$(CH_3)_2C(O\bullet)CH_2OOCH_3 \rightarrow (CH_3)_2CO + CH_3OOCH_2\bullet$ [or $CH_3\bullet + CH_3C(O)CH_2OOCH_3$]

Demerjian, et al. AESTC9-1974-4-1 (review)

$(CH_3)_3COOCH_3 \rightarrow (CH_3)_2C{=}CH_2 + CH_3OH$

Choo, et al. IJCKBO-1974-6-631

$(CH_3)_3CCH_2OOH \rightarrow (CH_3)_3CCH_2O\bullet + OH$

Antonik and Lucquin BSCFAS-1971-3139
Fish, A. CBFMAO-1969-13-23 (mechanism)

$(CH_3)_2C(OOH)CH_2CH_3 + (CH_3)_2C(OH)CH_2CH_3 \rightarrow 2(CH_3)_2C(O\bullet)CH_2CH_3 + H_2O$

Degtyareva, et al. NEFTAH-1972-12-854

$CH_3CH{=}C{=}C(CH_3)_2$ + O → products

Havel, J. J.	JACSAT-1974-96-530	

$CH_2{=}CHCH_2CH_2CH{=}CH_2$ + O_2 → products

Salooja, K. C.	CBFMAO-1968-12-597	

$CH_3CH_2CH_2CH_2CH{=}CH_2$ + O → products

Cvetanović, R. J.	CJCHAG-1960-38-1678	(review)
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
Herron and Huie	JPCRBU-1973-2-467	(review)

$(CH_3)_2C{=}C(CH_3)_2$ + O → products

Cvetanović, R. J.	JCPSA6-1960-33-1063	
Cvetanović, R. J.	CJCHAG-1960-38-1678	(review)
Cvetanović, R. J.	ADPCA2-1963-1-115	(review)
Cvetanović, R. J.	JCPSA6-1959-30-19	
Davis, et al.	JCPSA6-1973-59-628	
Furuyama, et al.	IJCKBO-1974-6-741	
Havel, J. J.	JACSAT-1974-96-530	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)

$CH_3CH_2CH_2CH_2CH{=}CH_2$ + O_2 → products (overall)

Bawn and Skirrow	SYMCAQ-1955-5-521	
Kucher, et al.	DBGGAM-1974-36-1019	
Nechitailo, et al.	JOCYA9-1974-10-2035	
Salooja, K. C.	CBFMAO-1968-12-597	
Shtern, V. Ya.	BOOKA7-1964	(review)
Skirrow, G.	PRLAAZ-1958-244-345	

cis- or trans-$CH_3CH_2CH_2CH{=}CHCH_3$ + O_2 → products

Kucher, et al.	DBGGAM-1974-36-1019	

$CH_3CH_2CH_2CH_2CH{=}CH_2$ + O_3 → products

Bufalini and Altshuller	CJCHAG-1965-43-2243	
Cadle and Schadt	JACSAT-1952-74-6002	
Cox and Penkett	JCFTAR-1972-68-1735	
Hanst, et al.	ACPCAT-1959-136-A7	
Japar, et al.	JPCHAX-1974-78-2318	
Saltzman, B. E.	IECHAD-1958-50-677	
Saltzman and Gilbert	IECHAD-1959-51-1415	
Stedman, et al.	JPCHAX-1973-77-2511	
Vrbaski and Cvetanović	CJCHAG-1960-38-1053	
Wei and Cvetanović	CJCHAG-1963-41-913	

cis- or trans-$CH_3CH_2CH_2CH{=}CHCH_3$ + O_3 → products

Wei and Cvetanović	CJCHAG-1963-41-913	

$CH_3CH_2CH_2C(CH_3){=}CH_2$ + O_3 → products

Cox and Penkett	JCFTAR-1972-68-1735	
Wei and Cvetanović	CJCHAG-1963-41-913	

$(CH_3)_2CHCH_2CH{=}CH_2$ + O_3 → products

Cox and Penkett	JCFTAR-1972-68-1735	
Wei and Cvetanović	CJCHAG-1963-41-913	

cis- or trans-$(CH_3)_2CHCH{=}CHCH_3$ + O_3 → products

Wei and Cvetanović	CJCHAG-1963-41-913	

cis- or trans-$CH_3CH_2C(CH_3)=CHCH_3$ + O_3 → products

Japar, et al.	JPCHAX-1974-78-2318	
Wei and Cvetanović	CJCHAG-1963-41-913	

$CH_3CH_2CH(CH_3)CH=CH_2$ + O_3 → products

Wei and Cvetanović	CJCHAG-1963-41-913	

$(CH_3)_2C=C(CH_3)_2$ + O_3 → products

Huie and Herron	IJCKBO-1975-7-Sup. 1	
Japar, et al.	JPCHAX-1974-78-2318	
Vrbaski and Cvetanović	CJCHAG-1960-38-1053	
Wei and Cvetanović	CJCHAG-1963-41-913	

$(CH_3)_2C=C(CH_3)_2$ + OH → products

Morris and Niki	JPCHAX-1971-75-3640	

$CH_3CH_2CH_2C(\cdot)(CH_3)_2$ + O_2 → $CH_3CH_2CH_2C(CH_3)_2OO\cdot$

Cullis, et al.	SYMCAQ-1963-9-167	(mechanism)

$(CH_3)_2CHC(\cdot)(CH_3)_2$ [or $(CH_3)_2CHCH(CH_3)CH_2\cdot$] + O_2 → $(CH_3)_2CHC(CH_3)_2OO\cdot$

Fish and Wilson	SYMCAQ-1971-13-229	(mechanism)
Trimm and Cullis	JCSOA9-1963-1430	(mechanism)

$(CH_3)_2CHC(\cdot)(CH_3)_2$ [or $(CH_3)_2CHCH(CH_3)CH_2\cdot$] + OH → products

Greiner, N. R.	JCPSA6-1970-53-1070	

$CH_3(CH_2)_4CH_3$ + O → products

Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)

$(CH_3)_2CHCH(CH_3)_2$ + O → products

Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)

$CH_3(CH_2)_4CH_3$ + O_2 → products (overall)

Bailey and Norrish	PRLAAZ-1952-212-311	
Berry, et al.	ADCSAJ-1968-76-86	
Cullis and Hinshelwood	DFSOAW-1947-2-117	
Cullis and Mulcahy	RIFPA9-1949-4-283	
Cullis, et al.	PRLAAZ-1966-289-402	
Johnson, et al.	IECHAD-1954-46-1512	
Kende and Gal	CBFMAO-1962-6-109	
Kuhn and Wellman	WSCPAH-1972-No. 72-41	
Malherbe and Walsh	TFSOA4-1950-46-824	
Malherbe and Walsh	TFSOA4-1950-46-835	
Öhlmann, G.	WZTLA3-1970-12-195	
Salooja, K. C.	CBFMAO-1962-6-275	
Salooja, K. C.	CBFMAO-1965-9-219	
Salooja, K. C.	CBFMAO-1968-12-597	
Shtern, V. Ya.	BOOKA7-1964	(review)
Wagner, H. Gg.	SYMCAQ-1963-9-454	

$(CH_3)_2CHCH_2CH_2CH_3$ + O_2 → products (overall)

Affleck and Fish	SYMCAQ-1967-11-1003	
Atherton, et al.	SYMCAQ-1973-14-513	
Cullis and Hinshelwood	DFSOAW-1947-2-117	
Cullis and Mulcahy	RIFPA9-1949-4-283	
Cullis, et al.	SYMCAQ-1963-9-167	(mechanism)
Cullis, et al.	PRLAAZ-1959-251-265	
Fish, A.	PRLAAZ-1966-293-378	

$(CH_3)_2CHCH_2CH_2CH_3 + O_2 \rightarrow$ products (overall) (Cont'd)

Fish, A.	PRLAAZ-1967-298-204	
Fish, et al.	PRLAAZ-1969-313-261	
Johnson, et al.	IECHAD-1954-46-1512	
Salooja, K. C.	CBFMAO-1962-6-275	
Salooja, K. C.	CBFMAO-1965-9-219	
Salooja, K. C.	CBFMAO-1968-12-597	

$(CH_3CH_2)_2CHCH_3 + O_2 \rightarrow$ products (overall)

Barat, et al.	SYMCAQ-1971-13-179	
Burt, et al.	CBFMAO-1965-9-159	
Cullis and Hinshelwood	DFSOAW-1947-2-117	
Johnson, et al.	IECHAD-1954-46-1512	
Salooja, K. C.	CBFMAO-1962-6-275	
Salooja, K. C.	CBFMAO-1965-9-219	
Salooja, K. C.	CBFMAO-1968-12-597	

$(CH_3)_3CCH_2CH_3 + O_2 \rightarrow$ products (overall)

Cullis and Hinshelwood	DFSOAW-1947-2-117	
Johnson, et al.	IECHAD-1954-46-1512	
Salooja, K. C.	CBFMAO-1962-6-275	
Salooja, K. C.	CBFMAO-1965-9-219	
Salooja, K. C.	CBFMAO-1968-12-597	

$(CH_3)_2CHCH(CH_3)_2 + O_2 \rightarrow$ products (overall)

Burt, et al.	CBFMAO-1965-9-159	
Cullis and Hinshelwood	DFSOAW-1947-2-117	
Fish and Wilson	SYMCAQ-1971-13-229	
Johnson, et al.	IECHAD-1954-46-1512	
Mill and Montorsi	IJCKBO-1973-5-119	
Salooja, K. C.	CBFMAO-1962-6-275	
Salooja, K. C.	CBFMAO-1965-9-219	
Salooja, K. C.	CBFMAO-1968-12-597	
Trimm and Cullis	JCSOA9-1963-1430	

$CH_3(CH_2)_4CH_3 + O_3 \rightarrow$ products

Razumovskii and Zaikov	DKPCAG-1973-212-806	

$(CH_3CH_2)_2CHCH_3 + O_3 \rightarrow$ products

Razumovskii and Zaikov	DKPCAG-1973-212-806	

$(CH_3)_2CHCH(CH_3)_2 + OH \rightarrow$ products

Fish and Wilson	SYMCAQ-1971-13-229	(mechanism)
Greiner, N. R.	JCPSA6-1970-53-1070	
Greiner, N. R.	JCPSA6-1970-53-1285	

$CH_3CH_2CH_2C(CH_3)_2O^{\bullet} \rightarrow CH_3CH_2CH_2^{\bullet} + (CH_3)_2CO$

Cullis, et al.	SYMCAQ-1963-9-167	(mechanism)

$(CH_3)_2CHC(CH_3)_2O^{\bullet} \rightarrow$ products

Trimm and Cullis	JCSOA9-1963-1430	(mechanism)

$(CH_3)_3CC(^{\bullet})(CH_3)OH + RH \rightarrow (CH_3)_3CCH(CH_3)OH + R^{\bullet}$

Trimm and Cullis	JCSOA9-1963-1430	(mechanism)

$CH_3CH_2CH_2CH_2CH(OO^{\bullet})CH_3$ [or $CH_3CH_2CH_2CH(OO^{\bullet})CH_2CH_3$] $\rightarrow$ products

Burgess and Robb	TFSOA4-1958-54-1015	
Cullis, et al.	PRLAAZ-1966-289-402	

$CH_3CH_2CH_2C(CH_3)_2OO^{\bullet} \rightarrow$ products

Cullis, et al.	SYMCAQ-1963-9-167	(mechanism)

$(CH_3)_2CHC(CH_3)_2OO\cdot \rightarrow$ products

Fish and Wilson	SYMCAQ-1971-13-229	(mechanism)
Trimm and Cullis	JCSOA9-1963-1430	(mechanism)

$CH_3CH(OOH)CH_2CH(\cdot)CH_2CH_3 \rightarrow$ products

Cullis, et al.	PRLAAZ-1966-289-402	

$(CH_3)_2C(OOH)C(\cdot)(CH_3)_2$ [or $(CH_3)_2C(OOH)CH(CH_3)CH_2\cdot$] $\rightarrow$ products

Fish and Wilson	SYMCAQ-1971-13-229	(mechanism)
Trimm and Cullis	JCSOA9-1963-1430	(mechanism)

$CH_3CH_2CH_2C(CH_3)_2OO\cdot + RH \rightarrow CH_3CH_2CH_2C(CH_3)_2OOH + R\cdot$

Cullis, et al.	SYMCAQ-1963-9-167	(mechanism)

$(CH_3)_2CHC(CH_3)_2OO\cdot + RH \rightarrow (CH_3)_2CHC(CH_3)_2OOH + R\cdot$

Trimm and Cullis	JCSOA9-1963-1430	(mechanism)

$(CH_3)_2CHOCH(CH_3)_2 + O_2 \rightarrow$ products

Minkoff and Tipper	BOOKA7-1962-184	(review)
Shtern, V. Ya.	BOOKA7-1964	(review)

$(CH_3)_2C(OOH)CH_2CH_2CH_3 \rightarrow (CH_2)_2C(O\cdot)CH_2CH_2CH_3 + OH$

Cullis, et al.	SYMCAQ-1963-9-167	(mechanism)

$(CH_3)_2C(OOH)CH(CH_3)_2 \rightarrow (CH_3)_2C(O\cdot)CH(CH_3)_2 + OH$

Trimm and Cullis	JCSOA9-1963-1430	(mechanism)

$CH_3CH_2CH_2OOCH_2CH_2CH_3 \rightarrow CH_3CH_2CH_2O\cdot + CH_3CH_2CH_2O\cdot$

Benson and O'Neal	NSRDAP-1970-21-429	(review)
Gray, et al.	PRKNAZ-1967-4-63	(review)

$(CH_3)_2CHOOCH(CH_3)_2 + O_2 \rightarrow$ products

Chamberlain and Walsh	RIFPA9-1949-4-301	

C_7 Compounds

$CH_3(CH_2)_4CH{=}CH_2 + O_2 \rightarrow$ products

Cullis, et al.	PRLAAZ-1969-311-253	

$CH_3(CH_2)_4CH{=}CH_2 + O_3 \rightarrow$ products

Cadle and Schadt	JACSAT-1952-74-6002	

cis- or trans-$CH_3CH_2CH{=}CHCH_2CH_2CH_3 + O_3 \rightarrow$ products

Hanst, et al.	ACPCAT-1959-136-A7	

$CH_3(CH_2)_4)CH(\cdot)CH_3 + O_2 \rightarrow CH_3(CH_2)_4CH(OO\cdot)CH_3$

Schröder, et al.	ZPCLAH-1964-225-175	(mechanism)

$(CH_3)_3CCH(CH_3)CH_2\cdot$ [or $\cdot CH_2C(CH_3)_2CH(CH_3)_2$, or $(CH_3)_3CC(\cdot)(CH_3)_2$] + OH → product

Greiner, N. R.	JCPSA6-1970-53-1070	

$CH_3(CH_2)_5CH_3 + O \rightarrow$ products

Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)
Marsh and Heicklen	JPCHAX-1967-71-250	
Öhlmann, G.	WZTLA3-1970-12-195	

$(CH_3)_3CCH_2CH_2CH_3 + O \rightarrow$ products

Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)

$(CH_3)_2CHCH_2CH(CH_3)_2 + O \rightarrow$ products

Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)

$CH_3(CH_2)_5CH_3 + O_2 \rightarrow$ products (overall)

Barnard and Harwood	CBFMAO-1973-21-141	
Bonner and Tipper	CBFMAO-1965-9-387	
Bonner and Tipper	SYMCAQ-1965-10-145	
Burgess and Laughlin	CCOMA8-1967-769	
Burgess and Laughlin	CBFMAO-1972-19-315	
Chen, et al.	HHHPA4-1966-32-1	
Cullis, et al.	PRLAAZ-1966-292-575	
Cullis, et al.	PRLAAZ-1969-311-253	
Cullis, et al.	PRLAAZ-1965-284-108	
Cullis, et al.	SYMCAQ-1971-13-195	
Lischke, et al.	ZPCLAH-1965-230-73	
Öhlmann, G.	WZTLA3-1970-12-195	
Öhlmann, et al.	ZPCLAH-1961-218-24	
Öhlmann, et al.	ZPCLAH-1961-218-42	
Orr, C. R.	SYMCAQ-1963-9-1034	
Pospelov and Saraeva	NEFTAH-1968-8-543	
Richter, et al.	ZPCLAH-1973-253-207	
Richter, et al.	ZPCLAH-1973-253-217	
Salooja, K. C.	CBFMAO-1968-12-597	
Saraeva, et al.	NEFTAH-1967-7-596	
Schröder, et al.	ZPCLAH-1964-225-175	(mechanism)
Shtern, V. Ya.	BOOKA7-1964	(review)
Szabo, et al.	ACASA2-1972-74-239	
Tipper and Titchard	CBFMAO-1971-16-223	
Yantovskii, S. A.	KICAA8-1964-5-27	
Yantovskii, S. A.	KICAA8-1964-5-348	
Yantovskii, S. Ya.	KICAA8-1966-7-16	
Yantovskii, S. A.	KICAA8-1967-8-437	

$CH_3CH_2CH(CH_3)CH_2CH_2CH_3$ + O_2 → products (overall)

Öhlmann, et al.	ZPCLAH-1961-218-24	

$(CH_3)_2CHCH_2CH(CH_3)_2$ + O_2 → products (overall)

Criegee and Ludwig	EKEPAB-1962-15-523	
Mill and Montorsi	ACSRAL-1971-161-PETR-8	
Mill and Montorsi	IJCKBO-1973-5-119	

$(CH_3CH_2)_3CH$ + O_2 → products (overall)

Barat, et al.	PRLAAZ-1971-325-469	
Barat, et al	SYMCAQ-1971-13-179	

$CH_3(CH_2)_5CH_3$ + OH → products

Cullis, et al.	PRLAAZ-1965-284-108	

$(CH_3)_3CCH(CH_3)_2$ + OH → products

Greiner, N. R.	JCPSA6-1970-53-1070	

$CH_3(CH_2)_5CH_3$ + HOO· → products

Cullis, et al.	PRLAAZ-1965-284-108	

$CH_3(CH_2)_5CHO$ + O_2 → $CH_3(CH_2)_5C(O)$· + HOO·

Cullis, et al.	PRLAAZ-1965-284-108	

$CH_3(CH_2)_4CH(OO·)CH_3$ → products

Burgess and Robb	TFSOA4-1958-54-1015	
Schröder, et al.	ZPCLAH-1964-225-175	(mechanism)

$(CH_3)_2C{=}CHCH{=}C(CH_3)_2 + O_2 \rightarrow$ products

Salooja, K. C.	CBFMAO-1968-12-597

$CH_3(CH_2)_5CH{=}CH_2 + O_2 \rightarrow$ products

Altwicker and Basila	TETRAB-1973-29-1969

$(CH_3)_2CHCH{=}CHCH(CH_3)_2 + O_2 \rightarrow$ products (overall)

Criegee and Ludwig	EKEPAB-1962-15-523

$CH_3(CH_2)_5CH{=}CH_2 + O_3 \rightarrow$ products

Altwicker and Basila	TETRAB-1973-29-1969
Cadle and Schadt	JACSAT-1952-74-6002

$CH_3(CH_2)_6CH_2{\cdot}$ [or $CH_3(CH_2)_5CH(\cdot)CH_3$, or $CH_3(CH_2)_4CH(\cdot)CH_2CH_3$, or $CH_3(CH_2)_3CH(\cdot)(CH_2)_2CH_3$] $+ OH \rightarrow$ products

Greiner, N. R.	JCPSA6-1970-53-1070

$(CH_3)_3CCH_2CH(CH_3)CH_2{\cdot}$ [or $(CH_3)_3CCH_2C(\cdot)(CH_3)_2$, or $(CH_3)_3CCH(\cdot)CH(CH_3)_2$, or $\cdot CH_2C(CH_3)_2CH_2CH(CH_3)_2$] $+ OH \rightarrow$ products

Greiner, N. R.	JCPSA6-1970-53-1070

$(CH_3)_3CC(CH_3)_2CH_2{\cdot} + OH \rightarrow (CH_3)_3CC(CH_3)_2CH_2OH$

Greiner, N. R.	JCPSA6-1970-53-1070

$CH_3(CH_2)_6CH_3 + O \rightarrow$ products

Avramenko, et al.	BACCAT-1967-247	
Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)
Huie and Herron	PRKNAZ-1975-8-1	(review)

$CH_3(CH_2)_3CH(CH_3)CH_2CH_3 + O \rightarrow$ products

Ford and Endow	JCPSA6-1957-27-1277	
Herron and Huie	JPCRBU-1973-2-467	(review)

$(CH_3)_3CCH_2CH(CH_3)_2 + O \rightarrow$ products

Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)
Marsh and Heicklen	JPCHAX-1967-71-250	
Michaud, et al.	JPCHAX-1974-78-1457	

$(CH_3)_2CHCH(CH_3)CH(CH_3)_2 + O \rightarrow$ products

Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)

$(CH_3)_3CC(CH_3)_3 + O \rightarrow$ products

Herron and Huie	JPCHAX-1969-73-3327	
Herron and Huie	JPCRBU-1973-2-467	(review)

$CH_3(CH_2)_6CH_3 + O_2 \rightarrow$ products (overall)

Cullis and Hinshelwood	DFSOAW-1947-2-117
Kuchta and Martindill	CBFMAO-1967-11-212
Nettleton, M. A.	FUELAC-1974-53-99
Salooja, K. C.	CBFMAO-1968-12-597

$CH_3(CH_2)_6CH_3$ + O_2 → products (overall) (Cont'd)

Shtern, V. Ya.	BOOKA7-1964	(review)
Yoshizawa and Kawada	BJSEA8-1973-16-576	

$(CH_3)_2CHCH_2CH_2CH(CH_3)_2$ + O_2 products (overall)

Criegee and Ludwig	EKEPAB-1962-15-523
Öhlmann, et al.	ZPCLAH-1961-218-24

$(CH_3)_2CHCH(CH_3)CH(CH_3)_2$ + O_2 → products (overall)

Burt, et al.	CBFMAO-1965-9-159

$(CH_3)_3CCH_2CH(CH_3)_2$ + O_2 → products

Barnard and Harwood	CBFMAO-1973-21-345	
Burt, et al.	CBFMAO-1965-9-159	
Nettleton, M. A.	FUELAC-1974-53-99	
Öhlmann, G.	WZLTA3-1970-12-195	
Öhlmann, et al.	ZPCLAH-1961-218-24	
Orr, C. R.	SYMCAQ-1963-9-1034	
Polymeropoulos and Peskin	CBSTB9-1972-5-165	(review)
Salooja, K. C.	CBFMAO-1968-12-597	
Shtern, V. Ya.	BOOKA7-1964	(review)
Yantovskii, S. Ya.	KICAA8-1966-7-16	
Yantovskii, S. A.	KICAA8-1967-8-437	

$CH_3(CH_2)_6CH_3$ + OH → products

Greiner, N. R.	JCPSA6-1970-53-1070

$(CH_3)_3CCH_2CH(CH_3)_2$ + OH → products

Greiner, N. R.	JCPSA6-1970-53-1070

$(CH_3)_3CC(CH_3)_3$ + OH → products

Greiner, N. R.	JCPSA6-1970-53-1070
Greiner, N. R.	JCPSA6-1970-53-1285

$(CH_3)_3CCH_2C(CH_3)_2OOH$ → products

Gray, et al.	PRKNAZ-1967-4-63

$(CH_3)_3COOC(CH_3)_3$ → $(CH_3)_3C(O)\cdot$ + $(CH_3)_3C(O)\cdot$

Allara, et al.	IJCKBO-1972-4-345	(calculation)
Benson and O'Neal	NSRDAP-1970-21-430	(review)
Gray, et al.	PRKNAZ-1967-4-63	(review)
Raley, et al.	JACSAT-1948-70-88	
Sokolova, et al.	KICAA8-1973-14-977	

$(CH_3)_3COOC(CH_3)_3$ + O_2 → products

Blake and Kutschke	CJCHAG-1961-39-278

$CH_3(CH_2)_6CH{=}CH_2 + O_2 \rightarrow$ products (overall)

Chernyak and Babii	DBGGAM-1973-35-750

$CH_3(CH_2)_7CH_3 + O_2 \rightarrow$ products (overall)

Döring, et al.	JPCEAG-1967-35-236
Pospelov and Saraeva	NEFTAH-1968-8-543
Saraeva, et al.	NEFTAH-1967-7-596

$(CH_3)_2CH(CH_2)_5CH_3 + O_2 \rightarrow$ products (overall)

Döring, et al.	JPCEAG-1967-35-236

$CH_3CH_2CH(CH_3)CH_2(CH_2)_3CH_3 + O_2 \rightarrow$ products (overall)

Döring, et al.	JPCEAG-1967-35-236

$CH_3(CH_2)_2CH(CH_3)CH_2(CH_2)_2CH_3 + O_2 \rightarrow$ products (overall)

Döring, et al.	JPCEAG-1967-35-236

$(CH_3)_3CCH_2CH_2CH(CH_3)_2 + O_2 \rightarrow$ products (overall)

Cullis and Foster	CBFMAG-1974-23-347

$(CH_3CH_2)_2CH(CH_2)_3CH_3 + O_2 \rightarrow$ products (overall)

Döring, et al.	JPCEAG-1967-35-236

$(CH_3CH_2CH_2)_2CHCH_2CH_3 + O_2 \rightarrow$ products (overall)

Döring, et al.	JPCEAG-1967-35-236

$CH_3(CH_2)_7CH{=}CH_2 + O_2 \rightarrow$ products (overall)

Chernyak, et al.	KICAA8-1973-14-685

$CH_3(CH_2)_7CH{=}CH_2 + O_3 \rightarrow$ products

Cadle and Schadt	JACSAT-1952-74-6002

$CH_3(CH_2)_8CH_3 + O_2 \rightarrow$ products (overall)

Cullis and Foster	CBFMAO-1974-23-347
Cullis and Foster	SYMCAQ-1973-14-423
Cullis and Hinshelwood	DFSOAW-1947-2-117
Gol'dberg and Obukhova	NEFTAH-1963-3-223
Maizus, et al.	KICAA8-1961-2-488
Makarov, et al.	RJPCAR-1970-44-1431
Syroezhko and Potekhin	JAPUAW-1973-46-1403
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Syroezhko, et al.	JAPUAW-1971-44-2082
Syroezhko, et al.	JAPUAW-1973-46-402
Vartanyan, et al.	ZFKHA9-1956-30-856
Vartanyan, et al.	ZFKHA9-1955-29-862

$(CH_3)_2CH(CH_2)_4CH(CH_3)_2 + O_2 \rightarrow$ products (overall)

Vasil'ev, et al.	BACCAT-1961-198

$CH_3(CH_2)_4OO(CH_2)_4CH_3 \rightarrow CH_3(CH_2)_4O\cdot + CH_3(CH_2)_4O\cdot$

Gray, et al.	PRKNAZ-1967-4-63 (review)

$(CH_3)_2C(CH_2CH_3)OO(CH_3CH_2)C(CH_3)_2 \rightarrow$ products

Raley, et al.	JACSAT-1948-70-88

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Norrish, R. G. W.	RIFPA9-1949-4-288
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Antonik and Lucquin	BSCFAS-1971-3139
Atherton, et al.	SYMCAQ-1973-14-513
Avramenko and Kolesnikova	DANKAS-1953-92-349
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Bateman, et al.	DFSØAW-1951-10-250
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Knox, J. H.	ADCSAJ-1968-76-1
Knox, J. H.	CCØMA8-1965-108
Knox, J. H.	CBFMAØ-1965-9-297
Knox, J. H.	BØØKA7-1967-250
Lischke, et al.	ZPCLAH-1965-230-73
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Semenov, N. N.	BØØKA7-1959-2
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Shtern, V. Ya.	BØØKA7-1964
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16. ABSTRACT (A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.)

A reaction oriented list of references is provided for papers and reports containing rate data for gas phase reactions of combustion and oxidation of aliphatic saturated or unsaturated C_1 to C_{10} hydrocarbons, alcohols, aldehydes, ketones, ethers, peroxides and their free radicals. The list also includes decomposition, disproportionation, atom transfer and recombination reactions of the oxygen containing species noted above. Pyrolytic reactions of hydrocarbons and their radicals are excluded. All the processes listed here have been reported to occur in the gas phase combustion of fuels. In addition, a list of critical reviews dealing with the reaction kinetics of the above processes and a list of papers dealing with generalized mechanisms of the same reactions are also included. More than 800 papers covering 540 reactions are listed. The period covered extends from 1902 through June 1975.

17. KEY WORDS (six to twelve entries; alphabetical order; capitalize only the first letter of the first key word unless a proper name; separated by semicolons)

Bibliography; chemical kinetics; combustion; free radicals; gas phase; hydrocarbons; oxidation; oxygen; oxygenated organic compounds; ozone.

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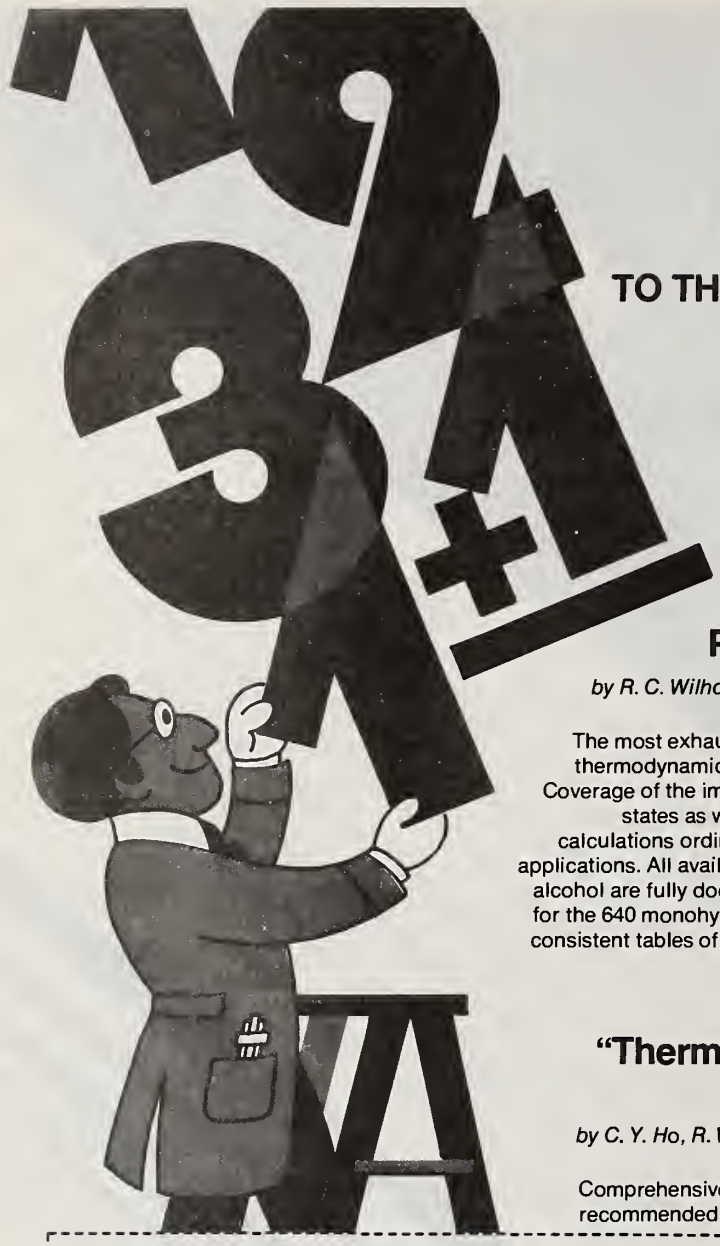

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